

Email this citation

<u>The Culture of National Security: Norms and Identity in World Politics</u>, by Peter J. Katzenstein, editor

4. Norms and Deterrence: The Nuclear and Chemical Weapons Taboos Richard Price and Nina Tannenwald

The concept of deterrence has been central to traditional international security studies. Deterrence has been invoked as the primary explanation for two central phenomena of twentieth-century international relations—the non-use of nuclear weapons and the non-use of chemical weapons. Yet, upon closer examination, it becomes clear that the conventional notion of deterrence—based on a rationalist account—does not by itself adequately account for the practice of non-use of these weapons. Instead, a significant normative element must be taken into account in explaining why these weapons have remained unused. Moreover, closer examination also reveals that rationalist explanations for the development of these norms themselves are indeterminate at best or mistaken at worst.

This essay offers an alternative view on deterrence and the non-use of nuclear and chemical weapons, one that highlights the socially constructed nature of deterrence and deterrent weapons. We argue that in order to fully account for why these weapons have remained unused, we must problematize, not assume, their status as deterrent weapons. The patterns of non-use of these weapons cannot be fully understood without taking into account the development of prohibitionary norms that shaped these weapons as unacceptable "weapons of mass destruction." Moreover, we argue that constructivist accounts are needed to redress gaps or mistakes in existing explanations for the origins and development of these norms.

The discussion presented here consists of four parts. It begins with a critique of the traditional conception of deterrence--a realist explanation that assumes that states are unified rational actors acting on the basis of exogenously given self-interest. We argue that the explanatory power of this conception in accounting for "non-use" is severely limited by its ultimate indeterminacy: it is impossible to know "what deters" or why a practice of non-use has arisen without investigating the normative context in which actor identities and interests are defined. Thus it is not that realist deterrence theory is entirely wrong so much as it is uninterested in the kinds of questions necessary for a full understanding of the phenomenon of the non-use of nuclear and chemical weapons. Positing deterrence as an unproblematic variable elides the question of how certain weapons have been defined as deterrent weapons whereas other weapons have not.

We then suggest social constructivist approaches that problematize the issue of non-use, the nature of the technology and weapons involved, and the notion of actor self-interest upon which traditional deterrence theory is based. The genealogical approach to the chemical weapons (cw) taboo and the social construction of nuclear deterrence both argue that in order to understand the anomalous status and patterns of non-use of chemical and nuclear weapons, it is necessary to understand how particular social and cultural meanings become attached to

certain kinds of weapons, how these normative understandings arise historically through actor practices and interpretations thereof, and how they shape actors' conceptions of their interests and identities.

The second and third sections of the essay then suggest how these two constructivist perspectives, respectively, illuminate the two empirical cases--chemical and nuclear. These cases provide a useful comparison, since their domains of analysis are somewhat different. The cw taboo originated largely at the systemic level, while the nuclear taboo arose domestically, principally (although not entirely) in the United States and was then diffused transnationally. These sections highlight how the differ ent conceptual puzzles opened up by these approaches result in a more complete account of the origins and roles of norms in international relations. They briefly sketch the historical development of the respective non-use norms, describe how they enter into an account of the non-use of these weapons, and then suggest several ways these norms have affected the substance of international politics. If anarchy and self-help are "what states make of it," then these non-use norms have constrained self-help by delegitimating certain kinds of military technologies. 1 More broadly, if the "structure" of the international system is understood to include both material and ideational elements, then these norms have come to play a significant role in structuring a certain kind of hierarchical world order in the post-Cold War era. 2

The final section of the essay evaluates some of the similarities and differences in the two cases with respect to the origins and role of prohibitionary norms in international politics. It summarizes a constructivist perspective on norms, clarifying the relationship between our argument and alternative explanations, as well as how these norms matter and where they came from. It seeks to demonstrate why explanations involving norms are not simply a matter of accounting for "residual variance."

The Social Construction of Deterrence Explaining Non-use

Deterrence theory, which draws on realist assumptions of unitary state actors and exogenously given interests, focuses its analytical attention on the use of retaliatory threats of force to deter attack. 3 Deterrence is defined as dissuading an adversary from doing something it otherwise would want to do (and which is perceived as threatening) through threats of unacceptable costs. The analytical power of rational deterrence theory derives from a set of simplifying assumptions about how states seek to maximize their utility. Most deterrence theorists stress a strong material cost-benefit logic to deterrence and a strong rationalism. 4

The logic of deterrence has been invoked as a primary explanation of the non-use of both nuclear and chemical weapons. As the argument goes, the non-use of these weapons is due substantially to fear of retaliation in kind. They are self-evidently so horrifying and/or destructive that actors acting on the basis of rational self-interest would naturally be deterred from employing them, for fear of the overwhelming devastation that nuclear or chemical retaliation would bring. This parsimonious account provides the dominant explanation for the non-use of nuclear weapons by the superpowers during the Cold War and is often cited as the most important immediate factor in explaining the non-use of cw. 5

Yet, explanations from deterrence are insufficient by themselves to explain the non-use of either chemical or nuclear weapons. For example, they cannot account for significant cases of the non-use of either weapon when there was no threat of retaliation in kind. For cw, the

Spanish Civil War, the Korean War, the French in Indochina and Algeria, the Vietnam War, and the Soviet intervention in Afghanistan are prominent cases. Even during the violence of World War II, cw were not employed in situations where they offered a clear military advantage. To cite but one example, the U.S. did not employ gas warfare against the Japanese, even though there was no threat of retaliation and cw would have been enormously effective against Japanese forces entrenched in the tunnels and caves of the Pacific Islands.

Likewise, a deterrence explanation cannot account for why nuclear weapons were not used by the United States during the first ten years of the nuclear era, when the U.S. possessed a virtual monopoly on nuclear weapons and fear of retaliation was not a dominant concern. In the late 1940s and early 1950s, the United States faced crises in Berlin, Korea, Quemoy and Matsu, and Dien Bien Phu. Yet, despite a perceived weak ness in U.S conventional military capabilities and a military strategy that relied increasingly upon nuclear weapons, U.S. leaders did not use nuclear weapons during these crises. Later, in the 1991 Persian Gulf war, U.S. officials effectively ruled out use of nuclear weapons against a nonnuclear Iraq, even though a small nuclear weapon could have been militarily effective on the desert battlefield. <u>6</u>

Several additional factors suggest why a traditional deterrence explanation is inadequate and raise the issue of the role of normative taboos in shaping the practice of non-use of these weapons. Here the deficiencies in the scholarship on the chemical and nuclear cases diverge somewhat: the literature on cw recognizes that a deterrent explanation alone is inadequate but does not fully explore the mutually constitutive operation of the normative status of cw and its successful definition as a deterrent weapon. In contrast, the nuclear literature by and large finds the deterrence explanation satisfactory. In both cases, however, the acceptance of "deterrence" as more or less unproblematic leads to a slighting of the role of other factors--in particular, normative ones--in shaping the patterns of non-use.

For cw, World War II offers the most studied and spectacular case of non-use, and it is widely recognized in the literature that the avoidance of chemical warfare cannot be attributed solely to deterrence. $_{\mathcal{I}}$ Indeed, there is a virtual consensus in this literature that attributes this non-event to three major factors:

The two sides warned each other not to use chemical weapons at the risk of strong retaliatory action in kind; a general feeling of abhorrence on the part of governments for the use of cb weapons, reinforced by the pressure of public opinion and the constraining influence of the Geneva Protocol; and actual unpreparedness within the military forces for the use of these weapons. 8

It is of signal importance to note that while some authors have privileged individual factors over others for different stages and aspects of the story, none of the major studies has dismissed the prohibitionary norm as irrelevant in the overall explanatory equation. 9 Thus while it has been argued that legal and moral restraints were not central in immediately affecting decisions to avoid using cw, 10 the same authors recognize that the unpreparedness of the military establishments cannot be taken as an unproblematic variable but has to be explained itself. It is here that normative and legal opposition to cw takes pride of place in explaining why cw were not used in World War II, as these restraints were crucial in preventing the assimilation of cw as a standard weapon of war. 11

On this basis alone, the normative opposition to cw cannot be dismissed as peripheral in preventing the use of cw in World War II. An even stronger case can be made, however, for the

impact of the taboo in preventing the use of cw. Just as the literature recognizes that the variable of military preparedness itself has to be explained, it is argued here that the variable of deterrence--the status of cw as a deterrent weapon--also has to be problematized. Why would the fear of retaliatory cw attacks be any more robust a restraint than the fear of other horribly destructive methods of warfare such as incendiary bombing raids or submarine attacks on civilian shipping? If we are to avoid merely begging the question of why a special dread of retaliation operated with respect to cw, we need to understand how the discursive practices of statesmen served to set cw apart as a symbolic threshold of acute political importance and defined cw as a weapon *that might not be used*.

In sum, the odium attached to cw is indispensable in accounting for their non-use. In the absence of a normative discourse that ostracized and politicized the use of cw as unacceptable, illegal, and reprehensible, a strong counterfactual case could be made for the possibility or even the probability that these weapons eventually would have been assimilated into military arsenals and their use would have proceeded as an uncontroversial and unpoliticized standard practice of warfare.

The nuclear case, in contrast, is in some ways a "harder" case for challenging traditional deterrence theory than that of chemical weapons because it is widely felt that the tremendous destructive power of thermonuclear weapons *does* render them qualitatively different from other weapons (and therefore makes them "natural" deterrent weapons). Also, in contrast to the chemical case, the U.S. military establishment has been fully prepared to use nuclear weapons.

Nevertheless, while a special dread of nuclear weapons may be easier to understand, the opprobrium attached to them--as with cw--does not follow purely "rationally" or logically from the nature of the technology. Use of the atomic bomb by the U.S. on Hiroshima and Nagasaki in 1945 (which caused less destruction than the firestorms in Tokyo a few months earlier) was widely supported in the United States, and moral arguments were invoked as justification. 12 It was only later, when the development of thermonuclear weapons appeared to clearly violate any previously existing conceptions of proportionate weapons, that a normative stigma against nuclear use emerged. But why did the nuclear taboo then come to apply equally to all nuclear weapons, small and large, tactical as well as strategic, irrespective of utility considerations? Why did subsequent efforts to pursue such things as "peaceful nuclear explosions" fail, despite the latter's peaceful and practical applications? Or, to take another angle, why have nuclear weapons, supposedly fearsome deterrent weapons, not deterred some conventional attacks by nonnuclear states against nuclear states or allies of nuclear states? 13 a name="121" > A rational deterrence explanation for nuclear non-use, while capturing some broad outlines of the Cold War nuclear experience, also glosses dangerously over the historical record. In doing so it tends to lend an impression of inevitability to the nuclear non-use tradition that is far from warranted. As military historians remind us, the enormous destructive capability of weapons and the prospect of retaliation cannot be assumed to give rise automatically to rational self-interested avoidance-of-use behavior on the part of actors; such assumptions have failed more often than not in the past. The parsimonious explanation for nuclear non-use obscures the variety of reasons that the bomb did not get used on different occasions, not all of which are "normative," to be sure, but not all of which qualify as "deterrent" either. These include concerns about lack of military effectiveness of bombs, shortage of bombs, disagreement over policy options, public and allied opinion, moral concerns, and, especially, contingency. However, as we discuss further in the fourth section of this essay, clear distinctions between "normative" and "nonnormative"

9/12/2009 10:00 PM

concerns may in actuality be difficult to make. In sum, the overall "pattern of caution" with regard to nuclear use in the postwar era does not mean that in each individual case of nuclear crisis, decision makers were cautious. 14 In fact, the picture over time of nuclear non-use by the United States suggests a significant role for a normative element in undergirding emerging perceptions of nuclear weapons as lacking in military utility. U.S. restraint with regard to nuclear use was in part a matter of chance, in part a matter of deterrence, but was also shaped in part by emerging American perceptions of nuclear weapons as "disproportionate" (a profoundly normative concern), a view that increasingly clashed with U.S. leaders' perceptions of America's moral identity. Even a "realist" such as John Lewis Gaddis concludes at the end of his examination of nuclear non-use during the early postwar period that moral considerations may have played a significant role. 15

Explaining the Taboos

Both the nuclear and the cw taboos are norms that matter in international politics. The odium attached to the use of these weapons is indis pensable in explaining their non-use. In addition, these taboos are phenomena that themselves cannot be reduced to the assumptions of deterrence theory. The problem with deterrence theory is not that its logic has never operated in the case of chemical and nuclear weapons but that it does not address the question of how a particular weapon comes to be defined in deterrent terms whereas other weapons do not or that of how actor "interests" with respect to use or non-use come to be defined. How is it that a prohibitive fear of cw has operated over and above the fear of other powerful means of destruction, some of which are accorded the legitimacy of "conventional" weapons despite their capability to wreak more havoc than cw can? Similarly, how have nuclear weapons been defined alternatively as moral or immoral weapons, and how have perceptions of them been shaped such that all uses of nuclear weapons are unacceptable? How did American decision makers come to define their interests with regard to nuclear use? How have both chemical and nuclear weapons been ostracized apart from other weapons as an unacceptable practice of warfare? What do these prohibitions mean for the practice of international politics?

Just as rationalist explanations for the non-use of nuclear and chemical weapons are not fully satisfactory, neither do rationalist explanations for the norms themselves suffice to accommodate some of the peculiarities involved in the origins and operations of these taboos. The argument is often made that cw have not been used, and a norm of non-use has developed, because cw are perceived as being of marginal military utility. While there is a long controversy over the question of utility of cw (because of complications such as wind conditions, logistical burdens, and so forth), this controversy has never been definitively resolved—there has never been unanimous agreement that the use of cw would not be advantageous in certain circumstances. In short, the argument that the cw taboo arose from the lack of utility of cw is not empirically sustainable, as cw have been favorably assessed by military establishments on many occasions. 16

A second kind of argument also draws upon the intrinsic characteris tics of cw to explain their anomalous status. Michael Mandelbaum has offered an account of the stigma against cw in the course of a comparison between the status of nuclear weapons and that of cw. But while he purports to provide an argument based on cultural and institutional restraints, in the end his case rests on the implausible argument that the opposition to cw is a genetic aversion rooted in human chromosomes. 17 His argument fails because, like arguments that ascribe the norm to the lack of utility of cw, it is premised on the assumption that there must be a rational reason for the taboo that can be deduced from the essential features of these weapons.

Likewise, it is often pointed out that while the United States did contemplate using nuclear weapons on several occasions, it never faced a situation in which its vital interests were at stake. The intended point is that the real "hard test" case for a constraining norm never materialized. This may be true, but it misses what is interesting here, which is precisely that historically, *despite* the fact that nuclear weapons are indeed qualitatively different, U.S. leaders on various occasions contemplated their use in cases of less than overwhelming national interest. This situation provides telling contrast with today's widely shared assumption that nuclear use could be morally contemplated only in the direct of circumstances (if at all). The historical comparison reminds us that the revolutionary nature of the weapons was not evident to all.

Further, the particular domestic sources of the nuclear taboo--a democratic United States--were crucial in shaping interpretations of these weapons as unusable. While a rationalist account may tell some of the nuclear story, ignoring questions about identity and thus taking interests as given leaves rational deterrence theory fundamentally unable to explain the criteria for "deterrence"--that is, what goes into leaders' calculations of "unacceptable costs." For similar reasons, rationalist regime theory, because it neglects identity, may offer an inadequate account of norms. With its ahistorical approach, rationalist regime theory has little to say about the origins and evolution of norms and practices that cannot be conceived as simply the rational calculation of the national interest. 18

Actually, both the nuclear and the cw taboos resist the parsimonious explanations offered by rationalist approaches. It is precisely the widely recognized anomaly that taboos may embody an "irrational" attitude toward technology--a norm that defies the realist dictum that only useless weapons are banned--that makes the origins and persistence of these norms such an intriguing puzzle.

For these reasons, it is clear that an account of the chemical and nuclear taboos requires an investigation into the meanings and social practices that have constituted these norms. As James Johnson argues, moral decision making must be understood as "essentially historical in character, an attempt to find continuity between present and past, and not an ahistorical activity of the rational mind." 19 That is, the nature of the question plays to the strengths of constructivist approaches to norms. Such approaches are provided by the genealogical method, on the one hand, and a "social construction of deterrence" approach, on the other. The differences in the two approaches lie in the primary analytical focus: the genealogical approach focuses on understanding how norms are constituted through social and discursive practices and how these discourses normalize or delegitimate forms of behavior; the social construction of deterrence perspective emphasizes the relationship between norms, identities, and interests and provides a causal explanation of how the norm affects outcomes. As will be made clear, these two approaches offer complementary methods of analyzing norms.

The genealogical method, a mode of analysis articulated by Friedrich Nietzsche and popularized more recently by Michel Foucault, is particularly appropriate for shedding light on the case of the cw taboo, for several reasons. **20** Not only is it a method specifically concerned with the origins and operations of moral discourses, but it also emphasizes the role that contingency and chance play in the constitution of moral institutions. As will be discussed below, such fortuitous factors played a major role in the origins and development of the prohibition against the use of cw. In addition, the genealogy is a constructivist approach and is thus well suited to the contention of this essay that the cw taboo is a political construction that cannot be adequately explained solely by virtue of the intrinsic qualities of cw.

Besides remedying the deficiencies of rationalist approaches by historicizing moral institutions, this study of the cw taboo draws upon the genealogical method through its analytic focus on moral discourses. Discourses produce and legitimate certain behaviors and conditions of life as "normal" and, conversely, construct categories that themselves make a cluster of practices and understandings seem inconceivable or illegitimate.

Prohibitionary norms in this sense do not merely restrain behavior but are implicated in the productive process of constituting identities as well: actors have images of themselves as agents who do or don't do certain sorts of things. Unlike some approaches, which seek to distance the study of norms from power, then, the genealogy in this way implicates norms in hierarchical relations of domination and resistance. Drawing upon these insights of the genealogy illuminates aspects of the origins, functions, and development of the cw taboo that have gone underanalyzed in the literature. All of this results in a better appreciation of the sources and robustness of this remarkable success in banning a weapon of war.

A social constructivist perspective on deterrence also problematizes the social and historical construction of deterrence, but that approach takes as its analytical focus the interaction between norms and the constitution of identities and interests of the actors involved. It holds that in order to determine "what deters," the identity and interests of actors have to be investigated. A social constructivist approach is explicitly interested in the relationships among norms, interests, and outcomes but conceives of norms very differently from the way a rationalist account does. In a rationalist view, norms constrain exogenously given self-interest and behavior or lead to recalculations of self-interest. In the constructivist view--developed primarily in the sociological literature--norms shape conceptualizations of interests through the social construction of identities. 21 Actors conform to norms in order to validate social identities, and it is in the process of validating identities that interests are constituted. Thus both the creation, and reproduction, of norms and their salience for actors are inseparable from the social constitution of actors' identities.

Both of these approaches open up sets of questions different from those that are typically posed by the dominant approaches in international relations scholarship, and it is this problematic that is required for an adequate account of these weapons taboos and their influence on outcomes. What set nuclear and chemical weapons as categories apart from other methods of warfare in the first place? How were nuclear and chemical weapons defined and delegitimated as a special category of "nonconventional" weapons, and what features of these weapons were regarded as critical in regarding them as unacceptable weapons? How did actors come to define their interests with regard to these weapons, and how were their identities validated in the construction and strengthening of these norms? Have the meanings of the taboos changed over time, and what are the implications of such discursive transformations for the robustness of the taboos? In the following two sections, we suggest how the genealogical and social constructivist perspectives illuminate the two cases by showing that deterrence and non-use cannot be adequately explained on a purely rationalist basis, but rather require attention to the elements of identity, contingency, and the socially constructed nature of weapons taboos.

The Chemical Weapons Taboo

In this short space it is not possible to address at each point every alternative explanation for each issue and event relevant to the development of the cw taboo and the non-use of cw. Instead, the account that follows is designed to illustrate the contributions of a genealogical

analysis by filling in neglected gaps in the cw story and redressing key errors. First, and in opposition to essentialist explanations and arguments from utility, the contingency involved in the political construction of the cw taboo is examined to underline the difficulties of a straightforward rationalist accounting of its origins and development. Second, the development of the contested features of the moral discourse are traced in an effort to gauge the robustness of the norm. Third, it is argued that a better understanding of the meaning and significance of violations of the cw taboo is gained when it is recognized that this taboo is implicated in the hierarchical operation of ordering war and international relations according to a discourse that characterizes nations as "civilized" and "uncivilized."

Contingency

Rather than being viewed as simply the inevitable result of the objective qualities of chemical weapons, as is often supposed, the cw taboo is better understood as a political construction that owes much to a series of fortuitous events. International law first proscribed chemical warfare at the Hague Conference of 1899, which banned the use of asphyxiating shells even though no such weapon had yet been developed. This prohibition was accepted by delegates to the conference largely because it was not believed to have much significance. In fact, however, the Hague Declaration subsequently proved to be of no small importance. As will be seen below, later prohibitions against cw--culminating in the Geneva Protocol of 1925--were made possible on the basis of the understanding that these bans represented not the creation of a new norm but only the reaffirmation of the norm embodied in the Hague Declaration. In the absence of the Hague Declaration, it is unlikely that agreement would have been reached on interwar efforts to proscribe cw. 22

If such an understanding made agreement on a renewed cw prohibition possible, efforts to proscribe cw might not even have been on the international agenda at all except for an interwar hysteria over cw generated by the overzealous propaganda efforts of the chemical industry lobby and the gas warfare lobby. Especially in the U.S. and Britain, a massive campaign made "totally irresponsible . . . exaggerations of new weapons developments" in order to secure chemical tariffs and the survival of chemical warfare departments. 23 The fearful scenarios of future danger that these lobbies constructed around the issue of cw were so effective because they encountered no opposition until it was too late: the same dialogue of dread was being inscripted by the opponents of gas warfare. 24 Hence, the image of cw that was constructed was far out of proportion to the actual danger they represented at the time, as many have noted. 25 Indeed, of all the recent technological innovations in offensive warfare, cw are the one weapon that is most susceptible to defensive measures, a fact that makes the image of cw as a special threat all the more intriguing.

This depiction of cw eventually backfired on those seeking to promote cw preparedness, for it led to renewed efforts to prohibit cw. The first major effort was at the Washington Naval Conference of 1921-1922. At this gathering, U.S. Secretary of State Charles Evans Hughes pushed through an absolute prohibition on any first use of cw, despite the unanimous recommendations of a subcommittee of experts that cw be treated the same as any other weapon. According to the subcommittee, "the only limitation practicable is wholly to prohibit the use of gases against cities and other large bodies of noncombatants in the same manner as high explosives may be limited." 26 While Hughes was prepared to accept the same kinds of limitations on cw as on other weapons if his resolution had encountered stiff opposition, 27 his proposal for an absolute ban was accepted as Article V of the Washington Treaty.

Its acceptance was made possible by the belief of the delegates at the conference that such a prohibition was neither nothing new nor anything terribly important. On the one hand, they saw it as merely reaffirming previous bans--the Hague Declaration, whose violation during World War I left little confidence in such treaties, and Article 171 of the Versailles Treaty, which itself cited the previous outlawing of cw as its basis and in any case was essentially an anti-German provision of a dictated peace. Furthermore, it was believed that such a treaty was not very important, since it would not prevent preparations for chemical warfare. Even though the Washington Treaty never came into effect, 28 the clause banning cw lived on in the sense that it served directly as the basis and even the rationale for the Geneva Protocol of 1925, which in turn has operated as the focal point of the cw norm for almost seventy years. 29

In genealogical fashion, an institutional tradition prohibiting cw came to be invoked as its own justification, in such a way as to obscure the fortuitous ancestry of the taboo. The cw taboo was reborn from the ashes of World War I not simply as a technologically determined and self-interested reaction to a prohibitively costly new means of warfare but also as a political construction whose institutionalization has in turn helped to politically legitimate the definition of cw as a practice beyond the pale of civilized nations.

Defining Features

An important aspect of the cw taboo that is brought out by the genealogical tracing of discourses concerns the features of the taboo that have been regarded as essential in defining cw as unacceptable. When the Germans initiated the use of lethal chlorine gas from cylinders in the trenches of World War I, they defended this use of cw by arguing that it was no more cruel than shattering soldiers to bits with guns and howitzers. In taking this position, the Germans directly challenged the presumption of the cw prohibition that cw were an especially inhumane method of warfare. This contestation of the very core of the cw prohibition became even more prominent in the U.S. Senate during the ratification hearings for the Geneva Protocol. Typical of such a position was the contention of Senator David Reed that the cw ban would prevent the U.S.

from using gas against the next savage race with which we find ourselves in war, and would compel us to blow them up, or stab them with bayonets, or riddle them and sprinkle them with shrapnel, or puncture them with machine-gun bullets, instead of blinding them for an hour or so until we could disarm them. That is the "humanity" that is attempted to be worked out by the Geneva Protocol. 30

Because the humanitarian core of the cw taboo has over time become increasingly unacceptable to question, such sentiments strike most contemporary observers as rather unsettling. To bring this out more starkly, the above developments can be compared to attitudes toward cw during the most recent use of cw, the Iran-Iraq war of the 1980s. Iraq did not even admit to the use of cw until the last year of the war. Even then, Iraq's leaders stated that they supported the general rule prohibiting the use of cw; Iraq justified the use of cw as the "right to defend itself and protect its territorial integrity and its homeland." 31 One need not attribute too much credence to Iraq's claims to abide by the cw norm to notice that something significant had not occurred: a reopening of what has over time become the humanitarian core of the cw norm. Similar to the Italians in their war against Ethiopia in 1935-1936, the Iraqis made no attempt to legitimate their use of cw on the basis of the alleged humanitarian qualities of cw.

This closure of direct challenges to the humanitarian definition of cw as a particularly odious means of warfare is indicative of a gradual strengthening of the taboo over time. Indeed, while it may seem that the opposition of many Arab nations to the Chemical Weapons Convention 32 represents a fundamental challenge to the anti-cw norm, it will be argued below that this contestation in fact positively depends on cw's being ostracized as a terror weapon of last resort, though now in its more recent incarnation as a "weapon of mass destruction."

Domination and Resistance: Weapons of Mass Destruction

A significant manifestation of the cw prohibition has been its operation in the hierarchical ordering of relations of domination in the international system. This feature of the taboo is most evident in the characterization of cw as weapons of the weak and the taboo's role in the disciplining discourse of civilized conduct of international society.

The Hague Declaration established a discriminatory regime insofar as its language stipulated that the ban against asphyxiating shells was "only binding on the Contracting Powers in the case of war between two or more of them." Furthermore, the declaration stated that "it shall cease to be binding from the time when, in a war between the Contracting Powers, one of the belligerents shall be joined by a non-Contracting Power." Those contracting powers were the nations that would count as the members of an emerging society of civilized states. That is, one of the qualifications for gaining the status of a civilized nation was to participate in the regulation of warfare that began among the European society of states in the mid-nineteenth century. 33 As such, the origins of the cw taboo were implicated in exclusionary practices that distinguished between civilized and uncivilized areas of the globe.

The symbolic connection of cw with standards of civilized conduct has made it more difficult for advanced nations to employ these weapons against each other as just another unremarkable, unpoliticized, and standard means of warfare. At the same time, however, it has also played a part in undermining the taboo in "uncivilized" areas. The invocation of the disciplining discourse of civilization operated during the two most significant violations of the cw taboo since World War I: their use against Ethiopia by Italy in 1935-1936 and during the Iran-Iraq war of the 1980s.

The use of cw against Ethiopia led some to expect--and fear--that their employment would be a matter of course during World War II. 34 For others, however, the assessment was different: war among the industrialized nations of Europe was a different matter than conflicts involving less technologically advanced areas, such as the colonies. 35 The surprising lack of gas warfare during World War II can thus be understood as part of a process by which the conduct of war among "civilized" nations was demarcated from that involving "uncivilized" nations. As one author has put it, a standard view of world affairs after Versailles was that the arenas of European war and colonial war might well have been separable. 36 And the use of cw might have been less unacceptable in one arena than in the other.

This phenomenon of differentiation in the acceptability of forms of warfare has received recent articulation by a number of authors, most forcefully perhaps by John Mueller. For Mueller, major war--war among developed states--has been subject to a gradual obsolescence that has not occurred in other areas of the globe. 37 The occasional ruptures of the cw taboo reflect the understanding that modern warfare between industrialized powers is a qualitatively different situation than war involving an "uncivilized" country. 38 Such was the argument of the Italians, who contended that the "Ethiopians have repeatedly shown she is not worthy of

The Culture of National Security

the rank of a civilized nation." 39

This disciplining discourse of identity has not issued solely from the developed world, however. In a July 1988 statement defending the use of cw, Iraqi foreign minister Tariq Aziz ventured to argue: "There are different views on this matter from different angles. You are living on a civilized continent. You are living on a peaceful continent." 40 cw were indeed a symbol of unacceptable violence--at least among "civilized" countries.

A related manifestation of the disciplining aspect of the cw discourse has been the characterization of cw as weapons of the weak. To be sure, the designation of cw as the "poor man's atomic bomb" has condescending overtones, but recently this characterization has been turned on its head. The link between chemical and nuclear weapons established by the termi nology of cw as the poor man's atomic bomb has been appropriated by some nations in the developing world--the Arab nations in particular--by situating it within a broader discourse of "weapons of mass destruction."

For the industrialized world, the category of weapons of mass destruction has served as the touchstone for efforts to curb the proliferation of advanced weapon systems in the Third World. The Arab world, however, has appropriated this discourse in a manner that has made explicit the double standard in the antiproliferation designs of the industrialized world: while the Third World is prevented from acquiring deterrents such as nuclear or chemical weapons, the Western powers are permitted to retain their weapons of mass destruction--conventional and otherwise--as legitimate tools of diplomacy. 41 Israel's undeclared nuclear arsenal is a particular concern in this strategy of linkage, and it is on these grounds of eliminating all weapons of mass destruction that the opposition of some nations to the Chemical Weapons Convention is centered.

This appropriation of the mass destruction discourse is a remarkable example of the kind of interpretive reversal that Nietzsche and Foucault had in mind in their writings on moral discourses. As Foucault wrote, "The successes of history belong to those who are capable of seizing these rules, to replace those who had used them, to disguise themselves so as to pervert them, invert their meaning, and redirect them against those who had initially imposed them."

The important point to note for the purposes of this essay is the effects of this usurpation on the illegitimacy of cw. First, it is to be noted that framing unacceptable weapons in terms of the "weapons of mass destruction" discourse invites the question of why other enormously destructive "conventional" weapons are not included in this category. On that level, the overall thrust of the weapons discourse has been to try to expand the definition of unacceptable weapons rather than to restrict or abolish it. 43

Second, while the linkage to nuclear weapons conceivably could serve to justify the possession of cw as a deterrent, the linkage to nuclear weapons has not legitimated the actual use of cw. If anything, the taboo against using nuclear weapons is in all likelihood stronger and more universal than the taboo against using cw. Thus the effect of linking cw to nuclear weapons has been to further remove cw from the arsenal of standard and acceptable means of warfare.

The argument here is that this shift in the site of contestation of the norm--from earlier debates over the alleged humanitarian benefits of chemical weapons to contemporary efforts to extend the nonproliferation regime of weapons of mass destruction--is indicative of the

consolidation of the taboo over time. Not only is the resistance to the transformation of the norm from use to possession restricted to a small group of nations, but the main thrust of this resistance has not been to challenge the unacceptability of using cw so much as it has been to question the legitimacy of possessing other weapons of mass destruction, including the definition of what counts as such a weapon.

The Non-use of Nuclear Weapons

The analysis of the nuclear case offered here focuses initially on the non-use of nuclear weapons by the United States but then broadens its scope to examine, as in the chemical case, the global implications of the norm for non-use and its world-ordering impact. The "social construction of deterrence" perspective problematizes nuclear "deterrence" and seeks to determine on what grounds the United States was deterred. Why did President Truman agonize after World War II over the possibility of nuclear use again against a nonnuclear adversary while President Eisenhower actively considered nuclear use against allies of a nuclear-armed adversary, for example? Why were only a few nuclear weapons considered enough to deter in the early years while in later years "deterrence" was defined as requiring a much higher level of damage? What goes into the definition of "unacceptable costs"?

These kinds of questions highlight the relevance of a constructivist account that investigates how U.S. interests and identity were defined with respect to nuclear weapons and nuclear use. The account that follows emphasizes several features of the origins and operation of the nuclear non-use norm and its impact on outcomes. First is the nature of the initial precedent set by nuclear use on Hiroshima and Nagasaki, which provides a point of contrast for later developments. Second is the role of both practice and contingency in the development of the non-use norm and the nonlinear process by which it developed. Third is the way normative concerns that were linked with American identity reinforced emerging perceptions of lack of military utility of nuclear weapons on the part of American decision makers. Fourth, and finally, is the role the non-use norm has come to play in the selective delegitimation of nuclear weapons.

Parts of the constructivist account of nuclear non-use are complementary to a rationalist account (when fear of retaliation genuinely holds), and parts offer an alternative to the deterrence argument (when fear of retaliation is not prominent and other factors, including moral repugnance and the perceived illegitimacy of nuclear weapons, play a significant role). In all cases, however, a constructivist account is necessary to get at "what deters" and how/why deterrence "works."

The Initial Precedent: Hiroshima and Nagasaki--from Seamless Web to Utter Discontinuity

The first point to emphasize is the precedent that World War II created of a seamless web between nuclear and conventional bombing and between "tactical" and "strategic" bombing. It was only later that thresholds were created between the two. As historians have noted, the atomic attacks on Japan represented a continuation of--not a rupture with--wartime bombing strategy. 44 While the attacks on Hiroshima and Nagasaki were carried out with new and revolutionary weapons, they simply culminated an effort by American strategic air power to decimate almost every important city in Japan through firebombing. Nuclear weapons provided a more effective means of carrying out a strategy that was already widely and vigorously pursued through conventional bombing, and "it was not thought that any

irreversible threshold had been crossed." 45 In fact, conventional bombing *intensified* after the nuclear attacks, and the heaviest conventional bombing of the war followed Hiroshima and Nagasaki. 46 General Leslie Groves, head of the Manhattan Project, wanted to drop as many nuclear bombs on Japan as were ready. 47 Plans were discussed for dropping a third atomic bomb in late August if Japan did not surrender; after news of the scale of the destruction at Hiroshima and Nagasaki, President Truman was reluctant to do so, but he began to think he might have to. Recent research reveals that General George Marshall, Army Chief of Staff, briefly explored the tactical use of atomic bombs in connection with plans for the possible invasion of Japan at the end of the war. 48

These facts emphasize the continuity of atomic weapons with existing military strategy and plans. George Quester highlights this continuity, noting that the kind of thinking we tend to associate largely with nuclear weapons existed *before* 1945 with regard to strategic (conventional) bomb ing: "Modern terms such as 'deterrence,' 'tacit agreement' or 'balance of terror' show up often in the literature, coupled with descriptions of war scenarios every bit as awesome as a nuclear holocaust." 49 Thus the label of "weapons of mass destruction" cannot be said to be simply a straightforward designation of objective features.

Contingency, Iteration, and Principled Belief

While the notion that nuclear weapons ought to remain unused after Hiroshima and Nagasaki dates from the immediate postwar period, 50 its realization in practice and its transformation from a notion of prudence and, for some, moral belief into a collective, normative understanding was a matter of a gradual historical process. During the early period of the Cold War, little consensus existed on the nature of nuclear weapons, their military or political uses, how they should be controlled or managed, or whether they should, or would, be used again. But as the United States became increasingly vulnerable to Soviet nuclear attack, especially after the development of thermonuclear weapons and advanced delivery capabilities by both sides in the mid-1950s, the perception that strategic nuclear weapons could have no meaningful uses increased. However, the development of tactical nuclear weapons combined with the increased prospect of retaliation gave rise to a temporary interest in limited nuclear wars and the possible creation of various kinds of "thresholds."

It was thus only gradually during the postwar period that nuclear weapons acquired their status as unacceptable weapons and that the no-first-use taboo emerged and the utter discontinuity between nuclear weapons of all kinds and conventional weapons was established. But this development was neither linear nor inevitable; rather, it owes much to the combined workings of contingency and the iterated practice of non-use over time, as well as to self-conscious efforts on the part of some to foster a normative stigma. For example, President Truman, though he had been the one who actually dropped the bomb, expressed great horror at the possibility of having to do so again. His administration spent considerable energy pursuing the Baruch Plan for international control of atomic weapons at the un, and Truman established the precedent of civilian control over nuclear weapons, thus signaling their special status. 51 The Eisenhower administration, however, subsequently attempted to reverse earlier efforts at setting nuclear weapons apart as something "different." It is useful to speculate on the counterfactual situation--that had Eisenhower preceded Truman as president, postwar nuclear history might have looked quite different.

The Impact of the Norm

While conventional deterrence theory takes interests as given, from the constructivist perspective the issue is how normative considerations, identities, and interests regarding nuclear use mutually shaped each other and hence influenced outcomes. The Korean War provides a good example of how an emerging "taboo" against initiating use of nuclear weapons influenced American leaders. In the 1950s, the emerging non-use norm entered decision making instrumentally in the form of a "cost" (public opinion against the first use of nuclear weapons), which top decision makers initially sought to appease, while disagreeing with it themselves. When President Eisenhower and Secretary of State John Foster Dulles came into office, tactical nuclear weapons had recently become available, and they actively sought to make these weapons "usable," i.e., to make them like any other weapon. Their attempts reveal the normative stigma against nuclear weapons that was already beginning to emerge. Policy discussions during the spring of 1953 on how to end the Korean War suggest that Eisenhower and Dulles were more preoccupied by the constraint on nuclear use imposed by negative public opinion than by any more material concern. 52

Over time, a central element of the definition of nuclear weapons was that they were disproportionately lethal, and this aspect came to clash with U.S. leaders' perceptions of the United States as a moral country that took seriously the traditional laws of armed conflict, such as proportion in the use of force and the avoidance of killing noncombatants. During the cri sis over Quemoy and Matsu in 1958, several State Department officials who thought Dulles was too enthusiastic about seeking out opportunities for use of tactical nuclear weapons produced some estimates showing how many civilians would be killed on the islands by a U.S. tactical nuclear attack on Chinese forces. There is some reason to believe that this dampened Dulles's ardor for the nuclear option; in any case, the issue was disproportionate destruction of civilians—a normative concern—not fear of retaliation. 53

In contrast to the chemical case, in which chemical weapons were not well integrated into the military establishment, nuclear weapons have been the central element of U.S. military plans since the late 1940s. 54 This information raises the question of the location of the nuclear non-use norm. As it emerged, it was held primarily by the top civilian leadership and by the public, but not by the military as an institution. However, even the U.S. military and nato have over time moved away from the "early first use" plans of the early Cold War years toward what many have argued is a de facto no-first-use position. Normative development tends to proceed neither linearly nor necessarily coherently: norms can (and often do) develop even in the face of seemingly contradictory behavior. 55 As the non-use norm continues to strengthen, one would expect to see it increasingly reflected in operational plans that downgrade the role of nuclear weapons. 56

Though the U.S. was the only country ever to have used nuclear weapons in warfare, American leaders later came to define nuclear use as contrary to Americans' perception of themselves. As one high-level official reportedly said of the nuclear option during the 1991 Persian Gulf war, "We just don't do things like that." 57 This unwillingness to consider nuclear options in the war against Iraq, where no fear of retaliation existed, provides telling contrast to Hiroshima and Nagasaki. A non-use norm has ruled out any serious consideration of nuclear use in places where small nuclear weapons might have been useful--to bomb bridges or dams in the Vietnam War, for example, or in the Gulf war for use on massed Iraqi troops--wars that were otherwise highly destructive. 58 The drive to create "smart" bombs and other high-tech options so that leaders will not have to resort to nuclear weapons is indicative of the special status of nuclear weapons. Whereas nuclear weapons were once relied upon in order to avoid

spending money on conventional forces, the nuclear non-use norm now propels the building of high-tech conventional arsenals that are more politically "usable."

But with the convergence in destructive power of small nuclear weapons and advanced conventional weapons, the traditional threshold between nuclear and conventional technology may become increasingly blurred. Fuel-air explosives provide a case in point. During the Gulf war, coalition military leaders first worried about Iraq's possible use of fuel-air explosives and then used such weapons themselves at the end of the war against Iraqi forces. Military officials described the weapons as capable of delivering a devastating blast similar to a small nuclear explosion over an area several miles wide. 59 Unlike chemical and biological weapons, fuel-air explosives are blast-effect weapons and there is no ready defense against them. Official and private statements on why the United States would not need to resort to nuclear weapons in the Gulf war generally echoed the theme that the coalition could create equivalent damage with conventional forces without the moral "downside" of using nuclear weapons. The destructiveness of nuclear weapons per se was not a prominent feature of the reasoning. 60

The strength of the nuclear taboo and the odium attached to nuclear weapons as weapons of mass destruction render unusable all nuclear weapons, even though certain kinds or uses of nuclear weapons could, from the perspective of just war theory, conceivably be justified. The feature of nuclear weapons at the core of the taboo--their disproportionate nature--may change with advancing technology. As scattered proponents of tactical nuclear use during the Gulf war argued, in some circumstances the use of very small, accurate "micronukes" with low yields could minimize disproportionate destruction and avoid the killing of noncombatants. 61 The capability must be juxtaposed against the coalition's destruction of the Iraqi electric and water infrastructure during the Gulf war, which caused vast numbers of civilian deaths from infectious diseases and the lack of food, water, and medical care. 62 Such an attack erodes the moral claims against the killing of noncombatants, which are the traditional basis for objection to nuclear weapons. Thus the nuclear taboo may have "permissive effects"--permitting other weapons and practices that, while avoiding the stigma of nuclear means, accomplish equivalent ends of destructiveness.

The Non-use Norm and World Order

As suggested in the discussion of the cw taboo, both the chemical and the nuclear prohibitionary norms have become instruments for structuring certain kinds of status hierarchies in the international system, thus becoming, in effect, "world order" norms. This development is particularly interesting in the nuclear case because of the patently asymmetrical application of varying nuclear prohibitionary norms to different categories of states and because of the remarkably widespread---if ultimately fragile---acceptance of the legitimacy of this asymmetry.

In the post-Cold War era, nuclear proliferation has replaced superpower conflict as the major potential threat to the tradition of non-use. The links between non-use and nonproliferation are best understood in terms of the differing--and sometimes tenuous--degrees of legitimacy that the international community appears to attach to different aspects of nuclear weapons--use, acquisition, possession, and deterrence--and the ambivalence toward such weapons that this attitude ultimately reflects. 63 These various nuclear taboos apply unequally to states--only the great powers may legitimately possess nuclear weapons, for example--and provide mechanisms for the international community to differentiate the status and legitimacy of the various states. Compliance with the appropriate nuclear norms

reinforces the identity of states and their status as legitimate members of the international community and/or as a certain kind of state (responsible, civilized, etc.).

The non-use norm, for example, provides the basis for justifying asymmetrical rights and statuses between nuclear and nonnuclear powers. On one hand, the non-use norm has the effect of legitimating and stabilizing the practice of deterrence between the superpowers. Stable nuclear deterrence could not be taken for granted at the end of the 1950s; up to 1962, U.S.-Soviet relations were unstable because there was as yet no expected process by which they were conducted and there were few shared norms. After 1962, deterrence was stabilized by a host of arms control agreements that embodied a variety of shared understandings about nuclear weapons and were based implicitly on the expectation that nuclear weapons should not be used. 64 These made the process predictable and legitimated the concept and practice of deterrence as the appropriate form of superpower political competition.

On the other hand, nuclear deterrence is a practice reserved for the superpowers, and the non-use norm at the same time serves to justify the illegitimacy of the acquisition of nuclear weapons by the majority of the world. This relationship between non-use of nuclear weapons and "nonacquisition" is explicitly embodied in the Nuclear Non-Proliferation Treaty and in various commitments by the nuclear powers not to use nuclear weapons against nonnuclear powers who are parties to the treaty. 65

Norms, Constructivism, and Explanation

In the final section, we briefly compare and contrast the two cases, with the aims of drawing out some generalizations and also clarifying more specifically a constructivist conception of the role of norms. Specifically, we summarize and assess the contribution of our cases with respect to three questions: (1) What are alternative explanations of non-use? (2) How do these norms matter (what were their effects)? (3) Where did these norms come from (why is rationalism insufficient)? Consideration of these questions helps to illuminate the basic constructivist argument about norms and how they work, in particular why and how it is not merely a matter of explaining "residual variance."

The Two Cases Compared

The chemical and nuclear cases present a number of interesting similarities and differences with respect to the origins and role of norms. While both are highly specific norms, the nuclear non-use norm was initially *uninstitutionalized* (in fact, "use" is what was institutionalized), while the anti-cw norm was *institutionalized* from its earliest origins. 66 In the nuclear case, the de facto norm arose first, and only later did it begin to become institutionalized in bilateral and multilateral security and arms control agreements. Unlike the case of the chemical taboo, there is as yet no specifically *legal* prohibition against the use of nuclear weapons. 67 This process contrasts with that depicted by the dominant approach to norms in the international relations literature (i.e., rationalist regime theory), which tends to focus on how norms are created in the process of negotiating institutions (a process that may be more characteristic of political economy than of security issues). In contrast, the anti-cw norm is not only *institutionalized*, but the fact that it was institutionalized before the development of modern chemical weapons is perhaps the single most outstanding feature that explains how cw have been so successfully ostracized. Finally, the nuclear non-use norm is probably stronger and more widespread than the chemical taboo, despite the fact that it is largely a de facto norm.

These cases also raise the issue of the relationship between national and international norms. The nuclear case focuses on how a norm arose in a *national context* (that of the United States) and then was subse quently diffused more broadly, while the chemical case involves a norm that was created at the *international level* and then diffused into national policies. 68 Both of these analyses could, in theory, be broadened to look at the rise of these non-use norms globally (though this is not to claim that they are universal), the various processes by which this rise occurred, and the way these norms now shape actors' perceptions of their identities and interests. We have suggested how they both constitute part of a larger explanation concerning the rise of international society and efforts to regulate the destructiveness of warfare among "civilized" states. It was because of such concerns that cw (especially) and, later, nuclear arms control and disarmament were placed on the international agenda in the first place.

The single most important effect of these taboos, however, is that the delegitimation of these weapons constrains the practice of self-help in the international state system. Military technologies that might be useful under some circumstances are successfully proscribed. This phenomenon belies the realist view--captured in the sayings "war is hell" and "in time of war law is silent"--that everything is permitted in warfare. Rather, the existence of prohibitionary norms reveals that war is rarely absolute; instead, it displays features of a social institution. 69

National leaders are forced to seek or develop alternative technologies for use in war or defense--or else risk being classified as acting outside the bounds of "civilized" international society. "Society," not anarchy, is the source of constraining and permissive effects.

In sum, these stories suggest that the path of normative development can be highly varied. They suggest that prohibitionary norms can be institutionalized early or late, that they can arise from different sources--from power politics, moral opprobrium, and/or domestic politics--and that they can arise either in a national context and be diffused more broadly or at the international level. They also suggest that norms may arise more or less spontaneously or as the result of intentional efforts. Finally, they point to the important role of historical contingency in normative development, highlighting the often nonlinear, contingent, and contradictory features of this process.

Alternative Explanations

Why were the weapons not used? We have argued that the development of prohibitionary norms was a necessary condition for the limited use of nuclear and chemical weapons. Without these taboos, the patterns of use would likely have looked quite different. In short, there would have been more use. In order to explicate more precisely the nature of this claim, we show below how it relates to possible alternative explanations.

Several alternative explanations could be put forth. The most skeptical is the occasionally cited argument that nuclear and chemical weapons were not very useful and hence states did not use them. In this view--a classic realist argument--norms are simply frosting on the cake. They merely prohibit what states did not want to do anyway. States possessed alternatives (namely, conventional weapons) and therefore did not need to use nuclear or chemical weapons.

This view is easy to reject on both empirical and conceptual grounds. Both of these weapons were clearly viewed as useful weapons for a range of circumstances and were, in fact, used, with great effect. **70** The U.S. nuclear arsenal was initially developed as a more desirable, "more-bang-for-the-buck" alternative to a more expensive conventional force (a relationship

that has since been reversed because of the nuclear taboo). Since the advent of thermonuclear weapons, there has never been any real doubt about the military effectiveness of nuclear weapons or their potential for terror. Even as some U.S. political leaders began to question privately the utility of nuclear weapons, others, especially in the military, continued to view tactical nuclear weapons as militarily useful. 71 If anything, the history of nuclear weapons is a history of unresolved disputes over their utility, which continued into the 1990-1991 Gulf war.

Similarly, we noted earlier that in the case of chemical weapons there has always been an unresolved debate over their utility, because of limita tions such as dependence on weather conditions. There are, however, undeniable instances in the historical record in which it was recognized that cw would have been enormously useful from a military standpoint--Dunkirk, D day, and U.S. operations against the Japanese in the Pacific islands, to cite just a few examples.

Beyond the empirical inaccuracy of the claim, however, the very fact that the supposed lack of "utility" is put forth as a reason for non-use despite the historical record demonstrates a key constructivist contention. "Utility," like "rationality," can be read back into history to tell a compelling story, but it is not at all obvious that such "reasons" were decisive, nor is it clear how they developed in the first place. In fact, the rationalist argument often imposes a backward teleology: because these weapons were not used, it is assumed they could not have been very useful, and that is therefore taken to be the reason for non-use. Our takenfor-granted beliefs today that these weapons are not "useful" must not obscure the fact that they have been viewed as quite useful to accomplish specific military tasks, and those same technological capabilities remain. 72 If, indeed, states did not find them "useful," the more fundamental question is why states did not think they were useful, which we maintain had quite a bit to do with the existence of taboos.

A second line of alternative argument would accept the view that these weapons possess utility but would identify a set of "non-norms" reasons as to why they did not get used. That is, there may be reasons for non-use that have nothing to do with norms. 73 These could include, for example, fear of immediate retaliation, fear of longer-term military consequences, public and international opinion constraints, lack of organizational readiness, and so on. This perspective would suggest setting up a "test" between a "norms" explanation and a "non-norms" explanation. The analytical goal would be to establish what proportion of the "outcomes" is explained by "norms" and what proportion is explained by other factors. Neoliberal institutionalism takes this approach, a view quite sympathetic to the role of norms.

We entirely agree that these factors enter into an account of non-use for both of these weapons, though to varying degrees (for example, "lack of organizational readiness" does not apply to nuclear weapons). However, the problem with framing the question as such is that these supposed non-norms factors may *not* in fact be independent variables. They may only become politically salient because of the prior existence of a taboo or norm, however strong or weak. For example, while "lack of organizational readiness" in chemical warfare is not entirely reducible to normative disdain for cw, we show that such constraints were unlikely to have been decisive in the absence of more-politicized sources of restraint issuing directly from the cw taboo.

This point gets to the heart of a constructivist perspective on norms. Viewing norms as capturing the "residual variance," while consistent with a standard treatment of variables,

misses the core of constructivism. Constructivism does not view the world in terms of discretely existing independent variables whose independent effect on variance can be measured according to the logic of statistics. This was, after all, Friedrich Kratochwil and John Ruggie's critique of treating norms as variables. 74 Instead, certain issues, events, possibilities may matter—they become meaningful—only in the context of a norm. Thus a distinction between "norms" and "non-norms" explanations may in some instances risk becoming a false dichotomy. For example, to argue that nuclear and chemical weapons were not used because alternatives were available obscures the fact that alternatives would not even have been sought in the first place if these weapons had been seen as just another uncontroversial weapon, like grenades or artillery shells. What counts as a concern is shaped by the normative context.

Norms structure realms of possibilities; they do not determine outcomes. Attaching a percentage figure to the effects of the norms versus the effects of other factors may be one way to think about norms and outcomes. But we think this approach is inaccurate, because, as our cases show, other factors (e.g., cost/benefits of use versus non-use) become politicized and relevant only in the context of a prohibitionary norm that adds force to such factors. It was the combination of these factors at historical junctures that mattered, and without the norm, the combination would not have been as potent. That doesn't mean that the norm did all the work itself, nor does it mean that the norm is simply residual.

The bottom line is that these taboos were a necessary condition--in the sense that we describe above--for the pattern of non-use of these weapons, but they alone were not the single, all-powerful "variable."

How These Norms Matter

It is important to underscore that norms are quite marginal in the existing deterrence literature and that we are asking about a dimension of analysis that receives little attention in the standard treatments. Because we are telling a "norms story," it is easy to assume that we must be making a case for the all-determining effects of all-powerful norms. We do not claim these taboos are truly "taken-for-granted" norms--that is, fully developed, robust intersubjective structures of the type that are the focus of some interpretive theorists. They are rather contested norms-in-process that have on occasion but not always exhibited the quality of an unthinking context (more true for nuclear than chemical weapons).

Our case studies illustrate a number of ways in which norms work. As we have stated, they structure realms of possibilities and create "options" that would not have been self-evident in the absence of a norm. 76 But they need not be wholly "taken for granted" to count. We have also indicated the way they operate instrumentally--for example, as public opinion constraints on leaders in the case of nuclear weapons and as a source of bargaining leverage in the global nonproliferation regime for Arab states in the case of cw.

These stories also are not just tales of two taboos in isolation. As we show, they are firmly embedded in deeper, "civilizational" normative structures. While the taboos themselves may be "in process," the higher-order discourses and world-order norms we refer to--of value-neutral technology and "civilization"--possess the kind of taken-for-grantedness of a norm as intersubjective context.

For example, how do we account for the fact that the anti-cw norm is sometimes obeyed, sometimes violated? Deterrence arguments underscore that since World War I the only use of

cw has been against a foe that did not have a cw retaliatory capability. But explaining patterns of use and non-use via fear of retaliation fails to account for myriad situations in which no fear of retaliation existed and cw still were not used. To make sense of these practices, we need to take account of the higher-order norm of "civilization," which castigates users of cw as unfit for membership in civilized international society. This normative discourse structures new contexts of the realm of acceptable practice. It does not determine outcomes but makes certain practices acceptable or illegitimate. Without the cw taboo, there would not have been such otherwise unexplainable variation--cw would simply have been used whenever appropriate without controversy.

Likewise, without the normative inhibition on nuclear use it would be difficult to explain why the Soviet Union did not resort to nuclear weapons to avoid a costly and humiliating defeat in Afghanistan, why Britain did not use nuclear weapons in the Falklands, why Israel did not use them on Egypt in 1973, or the United States in the Gulf war--all cases in which the adversary could not retaliate in kind. It is also essential to making sense of the perceived illegitimacy of even benign uses of nuclear explosions, such as for blasting new riverbeds in northern Russia or harbors in developing countries. In remarking on the blanket perception of nuclear weapons as "evil," Thomas Schelling has noted the "virtually universal rejection" by American arms controllers and energy-policy analysts in the 1970s of a proposal to create an ecologically clean source of electrical energy that would have detonated tiny thermonuclear bombs in underground caverns to generate steam. As Schelling commented, "I have seen this idea unanimously dismissed without argument, as if the objections were too obvious to require articulation." The view was simply that "even 'good' thermonuclear explosions are bad and should be kept that way." 77 In sum, norms can work in a variety of ways and have a variety of effects. We highlight constraining, permissive, and constitutive effects of these taboos. They may manifest differing degrees of embeddedness or taken-for-grantedness. Norms can justify action or the lack thereof. They can work instrumentally, for example, out of fear of punishments (sanctions, costs) or the constraints imposed by domestic or international public opinion (this is consistent with a rationalist formulation). Norms also have permissive or enabling effects, permitting alternatives through both focusing and obscuring effects. They may also have constitutive effects--as we suggest with regard to the larger discourse of "civilization" and identity. Here they work because of conceptions of "who we are"--certain kinds of people just do or do not do certain things. Finally, they can be such a takenfor-granted part of "context" that they are not consciously considered at all.

Constructivism's contribution is that it evokes the "context" effects of norms. It rejects the dichotomy of norms versus interests/material factors. Material factors by themselves are not all there is; their meaning depends on how they are interpreted. We have shown that even in the hardest cases, such as nuclear weapons--in which material factors should be so overwhelming--it would be impossible to tell an entirely non-norms story about these non-use events.

Origins of Norms

A final issue is how we account for the existence of these taboos in the first place. As we have outlined above, the conventional explanation is a rationalist, functionalist one. It accepts the genuine usefulness of the taboos but argues that they reflect a straightforward utility function. These taboos and the resultant self-restraint are in the interests of states, and this explains both their origins and why people continue to observe them. 78

We have two lines of response to this explanation. First, as we argue, a rationalist account of the origins of these taboos is either wrong (cw) or incomplete (nw) on empirical grounds. For cw, the essentialist reasoning as exhibited by Mandelbaum cannot account for the taboo, and the argument from utility does not hold up. For nuclear weapons, the rationality argument, which dominates the literature, is important but underspecified and insufficient. It misses the fact that luck, contingency, iterated behavior, and moral concerns all went into changing interpretations of "interests" and the calculation of "rational" costs and benefits. Further, simply attributing abhorrence to nuclear weapons does not account for the changing context (such that they were not seen as prohibitively abhorrent during World War II but they were afterward).

This leads us to our second point, which is that a rationalist account is ultimately indeterminate. Saying that the origins of the taboos are ratio nally based begs the question of what gets to count as rational and why. Once taboos of self-restraint exist, it may well be functional to uphold them (for either instrumental or constitutive reasons). But our question is the prior one of what constitutes "functional" or "rational." We can imagine, for example, other taboos that would be very "functional" but that don't exist--taboos on war, handguns, cigarettes, missiles, etc. For example, it would have been very functional indeed for the belligerents in World War I to forsake the senseless slaughter of the trenches by "mutually deterring" each other from using machine guns. But they did not. Thus perhaps a weakness of our research design is that we do not study noncases of taboos, which might make clearer our point that there is nothing inevitable about the existence of these taboos, even though they might seem so self-evidently rational in retrospect. 79

Ultimately, it must be admitted, a rational story can be told about virtually any outcome in retrospect. But honest inquiry recognizes that rationalism, like any theoretical perspective, has both uses and limits; constructivism's contributions lie in probing the latter. It may well be that rationalism has theorized about norms and culture, i.e., instrumentally, and has explained them with rational choice arguments. We show other kinds of effects, and we demonstrate that these taboos developed for other reasons as well. We are not giving a story about "irrationality," but one about what counts as rational. A rational deterrence argument is thus not necessarily incompatible with the more complex "taboo" argument. Constructivism asks a different set of questions and attempts to fill in the gaps that rationalist approaches leave unexplained.

From the perspective of what counts as theory in international relations, our theoretical claims are modest. Our aims are more descriptive than theoretical, at least insofar as the focus on origins goes. We do draw on our case studies to suggest a number of generalizations regarding normative development and effects. But we make no claim to the kind of grand theory of international politics that overturns realist or liberal theory. Rather, the goal is to convince deterrence and rational choice theorists of the incompleteness of their arguments, not to defeat them in some epic Lakatosian battle as if only one can exist and the other must perish.

In conclusion, readers might wish to imagine what the world might be like if the taboos vanished--namely, if the use of these weapons came to seem "normal." This is an image of the future that practically everyone finds utterly horrible to contemplate. Perhaps taboos can thus be con ceived of as providing images of "implicit possible futures." They implicitly contain or communicate a subconscious human awareness or vision of a terrible state of affairs that could come to pass if the future develops in a certain way. **80**

Such a thought experiment suggests the meaningfulness of these taboos. Our insistence on historical contingency and luck reminds us that while there are no iron laws of history here, even a world arranged according to human constructions has its limits.

For their helpful comments and criticisms, we would like to thank the participants in the conferences at Cornell, Minnesota, and Stanford, and especially Judith Goldstein, Ronald Jepperson, Peter Katzenstein, Jeffrey Legro, Diana Richards, Scott Sagan, Alexander Wendt, and the late Richard Smoke.

Note 1: Alexander Wendt, "Anarchy Is What States Make of It: The Social Construction of Power Politics," *International Organization* 46, no. 2 (Spring 1992): 391-425. **Back.**

Note 2: For constructivist arguments regarding the structure of the international system, see Wendt, "Anarchy Is What States Make of It"; also see David Dessler, "What's at Stake in the Agent-Structure Debate?" *International Organization* 43, no. 3 (Summer 1989): 441-74. **Back.**

Note 3: Rational deterrence theory posits three basic requirements for deterring an adversary: credible capabilities, a clearly communicated threat, and a credible willingness to carry out the threat. See William Kaufman, "The Requirements of Deterrence," in William Kaufman, ed., *Military Policy and National Security*, p. 19 (Princeton: Princeton University Press, 1956). **Back.**

Note 4: The best discussion in support of rational deterrence theory is Christopher Aachen and Duncan Snidal, "Rational Deterrence Theory and Comparative Case Studies," World Politics 41, no. 2 (January 1989): 143-69. Deterrence theory has at its core rational choice theory, to which it adds a set of assumptions about the nature of strategic actors. Useful discussions are Daniel Little, "Rational Choice Theory," in Daniel Little, *Varieties of Social Explanation*, pp. 39-67 (Boulder: Westview, 1991), and Patrick M. Morgan, Deterrence: A Conceptual Analysis, vol. 40, Sage Library of Social Research (Beverly Hills, Calif.: Sage, 1977), pp. 77-100. **Back.**

Note 5: See, for example, Robert Jervis, *The Meaning of the Nuclear Revolution* (Ithaca: Cornell University Press, 1989); Albert Carnesale et al., *Living with Nuclear Weapons* (Cambridge: Harvard University Press, 1983); and McGeorge Bundy, *Danger and Survival: Choices About the Bomb in the First Fifty Years* (New York: Random House, 1988). On the cw case, see n. 9 below. **Back.**

Note 6: The handful of public calls for U.S. use of tactical nuclear weapons during the Persian Gulf war specifically invoked the 1945 precedent of saving American lives. Mirroring earlier arguments that were employed to justify the use of atomic weapons against Japan, some of the advocates of U.S. nuclear use against Iraqi troops went even further, underscoring the potential savings in lives on both sides of the battlefield if the United States used nuclear weapons. See, for example, physicist Lawrence Cranberg's "Tactical Nukes in Iraq: An Option That Could Ultimately Save Lives," New York City Tribune, November 20, 1990; Congressman Dan Burton on *Crossfire*, January 11, 1991; John Barry, "The Nuclear Option: Thinking the Unthinkable," *Newsweek*, January 14, 1991, pp. 16-17. **Back.**

Note 7: Referring to the non-use of cw between the Western Allies and the Axis powers during World War II is not to ignore that cw was employed by Japan in its campaigns in China and that the Germans used gas in their concentration camps. **Back.**

Note 8: Stockholm International Peace Research Institute (hereafter sipri), *The Problem of Chemical and Biological Warfare*, vol. 4, CB Disarmament Negotiations, 1920-1970 (Stockholm: Almqvist and Wiksell, 1971), p. 21. **Back.**

Note 9: See Frederic J. Brown, *Chemical Warfare: A Study in Constraints* (Princeton: Princeton University Press, 1968); sipri, *The Problem of Chemical and Biological Warfare, vol. 1, The Rise of CB Weapons* (Stockholm: Almqvist and Wiksell, 1971); sipri, *The Problem of Chemical and Biological Warfare, vol. 5, The Prevention of CBW* (Stockholm: Almqvist and Wiksell, 1971); Kenneth Adelman, "Chemical Weapons: Restoring the Taboo," Orbis 30, no. 3 (Fall 1986): 444; Susan Wright, "The Military and the New Biology," *Bulletin of the Atomic Scientists* 41, no. 5 (May 1985): 10; and John Ellis van Courtland Moon, "Chemical Warfare: A Forgotten Lesson," *Bulletin of the Atomic Scientists* 45, no. 6 (August 1989): 40-43. <u>Back.</u>

Note 10: sipri, The Rise of CB Weapons, p. 321; Brown, Chemical Warfare, p. 296. Back.

Note 11: sipri, The Rise of CB Weapons, pp. 334, 322; Brown, Chemical Warfare, pp. 293, 295. A number of factors have been identified as contributing to the failure of military establishments to be adequately prepared for chemical warfare in the years leading up to World War II: the uncertain military value of cw, the resistance of tradition-bound military cultures, the extra logistical burden of cw, and so on. Jeffrey W. Legro offers an organizational culture explanation in his richly researched *Cooperation Under Fire: Anglo-German Restraint During World War II* (Ithaca: Cornell University Press, 1995).

Similar kinds of resistance often accompany new weapons technologies, but rarely do they result in total abstinence from using such weapons. The argument here is that what made such factors politically decisive in retarding the acceptance of cw--and thus ultimately prevented their use in World War II--was the existence of a stigma against cw. **Back.**

Note 12: See Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (New York: Pantheon, 1985). **Back.**

Note 13: China attacked U.S. forces during the Korean War, North Vietnamese forces attacked U.S. forces in Vietnam, Egypt attacked Israel in 1973, Argentina attacked British forces over the Falklands in 1982, and most recently, Iraq attacked Israel and U.S. bases in Saudi Arabia in the Persian Gulf war. **Back.**

Note 14: This is made clear by Richard Betts's careful survey of cases of Cold War nuclear crises in Nuclear Blackmail and Nuclear Balance (Washington, D.C.: Brookings Institution, 1987). **Back.**

Note 15: John Lewis Gaddis, "The Origins of Self-Deterrence: The United States and the Non-use of Nuclear Weapons, 1945-1958," in *The Long Peace: Inquiries into the History of the Cold War*, pp. 104-46 (Oxford: Oxford University Press, 1987). **Back.**

Note 16: For example, during World War II, tests were done in the U.S. to determine the effectiveness of using cw against Japanese forces barricaded in the caves and tunnels of the Pacific islands. Even the most cautious assessments of those tests concluded that cw would be

effective, while some argued that the tests demonstrated that "gas is the most promising of all weapons for overcoming cave defenses" (John Ellis van Courtland Moon, "Project sphinx: The Question of the Use of Gas in the Planned Invasion of Japan," *Journal of Strategic Studies* 12, no. 3 [September 1989]: 303-23). See also Richard Price, "A Genealogy of the Chemical Weapons Taboo" (Ph.D diss., Cornell University, 1994). **Back.**

Note 17: See his *Nuclear Revolution* (Cambridge: Cambridge University Press, 1981), pp. 39, 48. **Back.**

Note 18: As noted by Robert Keohane, "International Institutions: Two Approaches," in Robert Keohane, International Institutions and State Power: Essays in International Relations Theory, pp. 158-79 (Boulder: Westview, 1989). To cite but one example, the U.S. was the dominant force behind interwar efforts to proscribe cw, even though it was recognized that the country would be giving up a material advantage with such a prohibition. See the remarks of the Navy Board in U.S. Senate, Disarmament and Security: A Collection of Documents, 1919-55 (Washington, D.C.: Government Printing Office, 1956), p. 701. **Back.**

Note 19: James Turner Johnson, *Just War Tradition and the Restraint of War: A Moral and Historical Inquiry* (Princeton: Princeton University Press, 1981), p. x. **Back.**

Note 20: See Friedrich Nietzsche, *On the Genealogy of Morals*, trans. Walter Kaufmann and R. J. Hollingdale (New York: Vintage Books, 1989); and Michel Foucault, "Nietzsche, Genealogy, History," in Paul Rabinow, ed., *The Foucault Reader*, pp. 76-100 (New York: Pantheon, 1984). **Back.**

Note 21: Francesca Cancian, *What Are Norms? A Study of Beliefs and Action in a Maya Community* (Cambridge: Cambridge University Press, 1975), p. 137; Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality* (New York: Anchor Books, 1966), part 3, pp. 129-84; Alexander Wendt, "State Autonomy and Structural Change in International Relations Theory" (unpublished manuscript, Yale University, December 1992). **Back.**

Note 22: For example, the Geneva Protocol was the product of a conference on the traffic in arms; it decided that it did not have the competence to create a new norm against cw. The protocol was actually enunciated as only a reaffirmation of an existing norm meant as a transitory measure until a future conference on cw could be held. **Back.**

Note 23: Brown, Chemical Warfare, p. 180. Back.

Note 24: The turnaround in assessments of gas warfare by these propagandists was remarkable. In contrast to earlier warnings of the catastrophic potential of cw, see the revised assessments by members of the U.S. Chemical Warfare Service in New York *Time* s, September 10, 1926, p. 6, and November 26, 1926, p. 12. One can imagine the contempt with which, in a moment of unsurpassed irony, the president of the American Chemical Society declared that the widespread feeling against gas was the result of hysteria and propaganda (New York Times, December 11, 1926, p. 3). **Back.**

Note 25: "To anyone who was prepared to consider the potentialities of cw dispassionately, it would have been clear that the chemical threat did not differ markedly from that posed by high-explosive weapons. Against well-equipped and well-disciplined troops, the chemical weapons of the time would never be overwhelming; if anything, their efficacy had declined since 1918" (sipri, The Rise of CB Weapons, p. 247). See also *Times* (London) editorial of April

3, 1923, p. 7; and L. F. Haber, The Poisonous Cloud (Oxford: Clarendon Press, 1986), pp. 288, 307, and 317. By 1927, a *New York Times* editorial (February 16, 1927, p. 22) had dismissed the exaggerated fears of cw as "sheer romancing," noting that the previous war had demonstrated that high explosives were far more destructive. **Back.**

Note 26: U.S. Department of State, Conference on the Limitation of Armament (Washington, D.C.: U.S. Government Printing Office, 1922), p. 730. <u>Back.</u>

Note 27: Charles E. Hughes, "Possible Gains," in Proceedings of the American Society of International Law, pp. 1-2 (Washington, D.C.: American Society of International Law, 1927). **Back.**

Note 28: The treaty did not come into effect--the French failed to ratify it because of their opposition to provisions regarding submarines. **Back.**

Note 29: At least until 1992, when agreement was reached on the Chemical Weapons Convention. **Back.**

Note 30: See Congressional Record, 69th Cong., 2d sess., 1927, 68, pt. 1:150. Back.

Note 31: "Paper Interviews 'Aziz on Kurds, Other Issues," Kuwait AL-QABAS in Arabic, October 31, 1988, Foreign Broadcast Information Service (hereafter FBIS), November 2, 1988, p. 27; and "WAKH Reports Khayrallah 15 September Press Conference," Manama WAKH in Arabic, 15 September 1988 *FBIS*, September 16, 1988, pp. 23-24. **Back.**

Note 32: The Chemical Weapons Convention (cwc), which opened for signature in January 1993, prohibits the possession, production, and transfer of cw. At the time of writing, 159 states have signed the cwc. **Back.**

Note 33: The rise of the society of states is associated with the work of Hedley Bull and Adam Watson. See in particular Bull's Anarchical Society: A Study of Order in *World Politics* (New York: Columbia University Press, 1977); Hedley Bull and Adam Watson, eds., The Expansion of *International Society* (Oxford: Clarendon Press, 1984); and also Gerritt W. Gong, The Standard of "Civilisation" in *International Society* (Oxford: Clarendon Press, 1984). **Back.**

Note 34: See, e.g., Anthony Eden's impassioned speech reported in *New York Times*, April 21, 1936, p. 18. **Back.**

Note 35: For example, the U.S. military "denied that there were any lessons to be learned from the use of gas as a weapon of opportunity against a totally unprepared enemy in a colonial war" (Brown, Chemical Warfare, p. 145). For a similar German assessment, see Rolf-Dieter Muller, "World Power Status Through the Use of Poison Gas? German Preparations for Chemical Warfare, 1919-1945," in Wilhelm Deist, ed., *The German Military in the Age of Total War*, pp. 183, 189 (Warwickshire: Berg Publishers, 1985). **Back.**

Note 36: George Quester, Deterrence Before Hiroshima: The Airpower Background of Modern Strategy (New York: John Wiley, 1966), p. 78. Thus while reports of Japan's use of cw against the Chinese were ignored, even the suggestion that cw was being contemplated in Spain drew preemptory attention from Britain. The use of tear gas by government forces was reported, and the insurgents claimed that they, too, had gas but "refuse to break the

international law which forbids its use" (*Times* [London], August 19, 1936, p. 10). In response, Britain sent its diplomats to investigate these allegations and convey the grave consequences that might follow from the use of gas even in reprisal (*Times* [London], September 8, 1936, p. 12). **Back.**

Note 37: John Mueller, Retreat from Doomsday: The Obsolescence of Major War (New York: Basic Books, 1989). Similarly, Francis Fukuyama has drawn a sharp distinction between the behavior of the Third World and the industrial democracies—the historical and posthistorical parts of the world. He argues that the rules of the latter are different from those of the former and that it is only in the historical world that the old rules of power politics continue to apply (Francis Fukuyama, The End of History and the Last Man [New York: *Free Press*, 1992]). See also James Goldgeier and Michael McFaul, "A Tale of Two Worlds: Core and Periphery in the Post-Cold War Era," *International Organization* 46, no. 2 (Spring 1992): 467-91; and Michael Doyle's finding that democracies do not fight wars against each other in "Kant, Liberal Legacies, and Foreign Affairs," parts 1 and 2, *Philosophy and Public Affairs* 12 (Summer and Fall 1983): 205-35 and 323-53. **Back.**

Note 38: And as Michael Adas has demonstrated, it was the level of technological sophistication--rather than race, religion, morality, or other factors--that served as the chief standard by which the West judged the degree of civilization of other societies. See his exhaustive account in *Machines as the Measure of Men* (Ithaca: Cornell University Press, 1989). **Back.**

Note 39: Giornale d'Italia, as reported in *New York Times*, July 4, 1935, p. 1. See also Amy Gurowitz, "The Expansion of International Society and the Effects of Norms" (unpublished paper, 1993). **Back.**

Note 40: *New York Times*, July 2, 1988, p. A3. **Back.**

Note 41: As one author has remarked, "The major nations' unwillingness to eliminate their nuclear weapons while resisting further chemical (and nuclear) proliferation is seen in some Third World nations as the height of hypocrisy. It sends a message that 'the lesser nations aren't mature enough for the most powerful of military capabilities' " (Victor A. Utgoff, "Neutralizing the Value of Chemical Weapons: A Strong Supplement to Chemical Weapons Arms Control," in Joachim Krause, ed., Security Implications of a Global Weapons Ban, p. 97 [Boulder: Westview, 1991]). See also Geoffrey Kemp, "The Arms Race After the Iran-Iraq War," in Efraim Karsh, ed., The Iran-Iraq War, pp. 269-79 (New York: St. Martin's, 1989). He argues that "many countries in the Near East and South Asia express a profound irritation at what they perceive to be selective Western outrage over the use of chemicals. They believe that the United States, having failed to prevent India, Pakistan and Israel from building nuclear weapons is now trying to deny them the very weapons that provide some sort of counter balance to nuclear devices" (p. 277). Back.

Note 42: Foucault, "Nietzsche, Genealogy, History," pp. 85-86. Back.

Note 43: This is not to say, however, that the view has not been expressed privately in the developing world--though not in official public discourse--that to die by chemical weapons is neither more nor less horrible than to die by bullet or flame. See, e.g., the testimony of Brad Roberts in U.S. Congress, Chemical Warfare: Arms Control and Nonproliferation (Washington, D.C.: U.S. Government Printing Office, 1984), pp. 60-61. **Back.**

Note 44: See Ronald Schaffer, *Wings of Judgment: American Bombing in World War II* (New York: Oxford University Press, 1985); and Michael S. Sherry, *The Rise of American Air Power: The Creation of Armageddon* (New Haven: Yale University Press, 1987). **Back.**

Note 45: Sheldon Cohen, Arms and Judgment: Law, Morality, and the Conduct of War in the Twentieth Century (Boulder: Westview, 1989), p. 91. It is important to note that while this view was shared by important segments of the military and political leadership, it was not the view of many of the scientists who had worked on the bomb, such as Robert Oppenheimer, who had a better appreciation of the revolutionary significance of the weapon. As the postwar period unfolded, the debate was precisely about whether nuclear weapons were revolutionary or not. Einstein's famous phrase "everything has changed except our way of thinking" indicates that both sides are right here. **Back.**

Note 46: On August 14 and 15, a 1,014-plane mission, the largest of the war, staged a fourteen-hour bombing attack on six Japanese cities, dropping six thousand tons of conventional explosives. This was after Radio Tokyo had broadcast Japanese acceptance of American terms (but before the message had reached Washington through official channels). According to the U.S. Air Force official history of the war, Air Force Chief of Staff Hap Arnold "wanted as big a finale as possible" (quoted in Leon V. Sigal, *Fighting to a Finish: The Politics of War Termination in the United States and Japan, 1945* [Ithaca: Cornell University Press, 1988], p. 254). *New York Times*, "Superforts Stage 6-Target Wind-Up," August 15, 1945, p. 8; Gar Alperovitz, *Atomic Diplomacy: Hiroshima and Potsdam*, 2d ed. (New York: Penguin, 1985), p. 26. **Back.**

Note 47: Sigal, Fighting to a Finish, p. 207. Back.

Note 48: See Barton J. Bernstein, "Eclipsed by Hiroshima and Nagasaki: Early Thinking About Tactical Nuclear Weapons," *International Security* 15, no. 4 (Spring 1991): 149-73. **Back.**

Note 49: Quester, Deterrence Before Hiroshima, pp. 1-2. Back.

Note 50: The very first resolution of the new United Nations General Assembly adopted unanimously as a goal "the control of atomic energy to the extent necessary to ensure its use only for peaceful purposes" (un ga Resolution 1[I], January 24, 1946). In a long paper in the fall of 1949 opposing development of the hydrogen bomb, George Kennan urged U.S. leaders to reconsider their commitment to the principle of nuclear first use, expressing strong aversion to that option (John Newhouse, *War and Peace in the Nuclear Age* [New York: Knopf, 1989], p. 77). This suggestion was not well received by Dean Acheson, who suggested that Kennan could go and preach his "Quaker gospel" somewhere else (David S. McLellen, *Dean Acheson: The State Department Years* [New York: Dodd, Mead, 1976], p. 176).

Starting in 1946, the Soviet Union regularly proposed that the use of nuclear weapons be prohibited, as a first step toward a comprehensive program of disarmament. **Back.**

Note 51: Gaddis, "The Origins of Self-Deterrence"; Gregg Herken, *The Winning Weapon: The Atomic Bomb in the Cold War* (New York: Knopf, 1980); Lawrence Freedman, *The Evolution of Nuclear Strategy*, 2d ed. (New York: St. Martin's, 1989). **Back.**

Note 52: See the records of discussions in Foreign Relations of the United States, 1952-1954, vol. 15, Korea, part 1, pp. 721-1151, and part 2, pp. 1152-446; and vol. 2, National Security

The Culture of National Security

Affairs, part 1, pp. 202-464. Back.

Note 53: C. Gerard Smith, who was close to Dulles and who was the director of Policy Planning at the time, recalled in an interview the attempt to disabuse Dulles of the notion that using nuclear weapons on military targets adjacent to the islands would not cause a large number of civilian deaths. Dulles was "being tempted by an activist group in the Pentagon that wanted to take out the artillery batteries at Amoy that were shelling the islands." Smith called in some weapons specialists from the Pentagon and asked them to estimate the civilian casualties that any such limited nuclear strike would produce. They estimated about 186,000 civilian casualties. Said Smith, "I never heard another word about it after that" (Newhouse, *War and Peace in the Nuclear Age*, p. 126). **Back.**

Note 54: The Single Integrated Operations Plan (siop) is the main operational statement of U.S. plans for using nuclear weapons in the event of a Soviet attack. For a concise history of siop, see David Alan Rosenberg, "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960," *International Security* 7, no. 4 (Spring 1983): 3-71. **Back.**

Note 55: An example is the decolonization/self-determination norm. See the discussion in Thomas Franck, *The Power of Legitimacy Among Nations* (Oxford: Oxford University Press, 1990), pp. 153-74. **Back.**

Note 56: In the nuclear case, the fact that the decision to use nuclear weapons rests with the president creates a significant gap between what the military has plans for and what the president might actually do. The historical record suggests that presidential thinking about nuclear weapons has been relatively independent of developments in strategic planning in the military. See Freedman, *The Evolution of Nuclear Strategy*, and Betts, *Nuclear Blackmail and Nuclear Balance*. **Back**.

Note 57: Author interview, Office of Policy Planning, State Department, March 6, 1992. **Back.**

Note 58: A Pentagon physicist calculated during the war that the conventional ordnance dropped on Iraq per week averaged the equivalent of a one-kiloton nuclear bomb (author interview, Pentagon, Washington, D.C., March 5, 1992). **Back.**

Note 59: Fuel-air explosives (faes) are among the most lethal of the new generation of high-tech weapons. They are a kind of gas bomb involving two detonations. Fuel dispersed in the air is ignited and detonates, creating a huge fireball and an invisible shock wave, which officials have described as similar to a tactical nuclear weapon. It spreads rapidly across a wide area and is capable of flattening buildings, destroying aircraft, knocking down oil rigs, and killing troops. According to Pentagon estimates, at peak efficiency FAEs have destructive effects ten times more powerful than conventional explosives of the same size (Douglas Frantz and Melissa Healy, "Iraqi Bomb Gives Nuke-Type Blast, Pentagon Says," *Los Angeles Times*, October 5, 1990, p. 18). **Back.**

Note 60: That is, the reasoning was not "Nuclear weapons are too destructive" but rather "We now have weapons that are as destructive as nuclear weapons." According to one commentator, nuclear use by the United States would be highly unlikely because "it has conventional weapons equivalent to very small nuclear weapons" (Juan J. White, "U.S. Forces Probably Have 500 N-Arms in Gulf," *USA Today*, November 30, 1990, p. 10). An analyst who studied nuclear warfare for the Air Force said, "Today we've got conventional weapons that

approach the effectiveness of the old nuclear stuff. We can dig out those Iraqi bunkers more effectively with guided 2000-pound bombs than with tactical nuclear weapons--and without the moral downside" (David Wood, *Minneapolis Star-Tribune*, February 10, 1991, p. 15). Said a former assistant secretary of defense, "Militarily you don't need them in terms of the damage you want to inflict on Iraq" (Lawrence Korb, quoted in Lee Michael Katz and Richard Latture, "Nuke Threat Always Implied," *USA Today*, February 8, 1991). **Back.**

Note 61: The most outspoken exhortations for nuclear use during the Gulf war came from Representative Dan Burton (R-Ind.) and physicist Sam Cohen, the "father of the neutron bomb." Burton argued that use of tactical nuclear weapons would save American lives (Dan Burton, "Tactical Nuclear Weapons Could Save Lives," *USA Today*, February 13, 1991, p. 10). Cohen urged the use of neutron artillery shells to attack Iraqi armored columns. He endorsed nuclear weapons as a more discriminating and effective weapon; see Sam Cohen, "Use Neutron Bomb on Iraqis?" *Los Angeles Times*, August 18, 1990. To dismiss such people as crackpots only reinforces the general perception of these notions as "beyond the pale" or "unthinkable" today. Despite the fact that both of them sought to justify nuclear use in just-war terms of proportionate destruction and saving lives, their views prompted outrage among other editorialists, opinion makers and security experts. See, for example, Mary McGrory, "Chilling Talk of Using Nukes," *Washington Post*, February 14, 1991, p. A2; Leslie Gelb, "Gas, Germs, and Nukes," *New York Times*, January 30, 1991; Joseph Nye, "Nuclear Restraint--Now and Later," *Boston Globe*, February 21, 1991, p. 13; Ellen Goodman, "The Nuke-em Brigade," *Boston Globe*, February 14, 1991, p. 31.

For a discussion of "micronukes," see Thomas W. Dowler and Joseph S. Howard II, "Countering the Threat of the Well-Armed Tyrant: A Modest Proposal for Small Nuclear Weapons," *Strategic Review* 19, no. 4 (Fall 1991): 34-39. **Back.**

Note 62: A special un report on the immediate postwar situation in Iraq stated that the conflict had wrought "near-apocalyptic results upon the economic infrastructure . . . Iraq has been relegated to a pre-industrial age" (Report to the Secretary-General on Humanitarian Needs in Kuwait and Iraq in the Immediate Post-Crisis Environment, un Security Council Document S/22366 [March 1991]). Various study teams concluded that this resulted in large numbers of civilian deaths well beyond the end of the war. One epidemiological report estimated more than 46,900 excess deaths among children between January and August 1991; see Alberto Ascherio et al., "Effect of the Gulf War on Infant and Child Mortality in Iraq," New England Journal of Medicine 327, no. 13 (September 24, 1992), pp. 931-36. More generally, see H. Jack Geiger, "Bomb Now, Die Later: The Consequences of Infrastructure Destruction for Iraqi Civilians in the Gulf War," in John O'Loughlin, Tom Meyer, and Edward Greenberg, eds., War and Its Consequences: Lessons from the Persian Gulf Conflict (New York: Harper Collins, 1994); Barton Gellman, "Allied Air War Struck Broadly in Iraq," Washington Post, June 23, 1991, pp. A1, A16; and Michael Walzer, "Justice and Injustice in the Gulf War," in David E. Decosse, ed., But Was It Just? Reflections on the Morality of the Persian Gulf War, pp. 1-17 (New York: Doubleday, 1992). Back.

Note 63: An eloquent discussion of the role of legitimacy in the international community is Franck, The Power of Legitimacy Among Nations. **Back.**

Note 64: The 1972 Anti-Ballistic Missile (abm) Treaty between the United States and the Soviet Union is the clearest and most important institutionalized expression of a non-use presumption. In its banning of missile defenses against nuclear weapons, the abm Treaty

reflects a shared understanding that nuclear weapons should not be used. **Back.**

Note 65: Lawrence Scheinman, "The Non-Proliferation Treaty: On the Road to 1995," IAEA Bulletin 34, no. 1 (1992): 33-40. **Back.**

Note 66: By institutionalized we mean explicitly or implicitly expressed in treaties, agreements, or documents with corresponding operationalization in some way in state practices. These are all obviously matters of degree. **Back.**

Note 67: Although resolutions and prohibitions passed in the United Nations General Assembly and other international forums have repeatedly proclaimed use of nuclear weapons to be illegal, the United States and other nuclear powers have consistently voted against them. Up through the 1950s, legal scholars were themselves divided over the legality of nuclear weapons use. Today, although there is probably some agreement that certain kinds of uses of nuclear weapons are illegal under traditional laws of armed conflict, there is by no means agreement that all use of nuclear weapons is illegal. The difficulty of coming to conclusions about the legality of nuclear weapons makes it more useful to think about their status in terms of the notion of legitimacy. For a history of legal interpretations of nuclear weapons, see Elliott L. Meyrowitz, *Prohibition of Nuclear Weapons: The Relevance of International Law* (Dobbs Ferry, N.Y.: Transnational Publishers, 1990). The first U.S. statement on the legality of nuclear use appeared in 1955. **Back.**

Note 68: Much of international norm creation has probably taken the first route, as the history of international law suggests. For example, revolutionary regimes such as France, America, and the Soviet Union injected new values and norms into the international state system. See David Armstrong, *Revolution and World Order: The Revolutionary State in International Society* (Oxford: Oxford University Press, 1993). **Back.**

Note 69: For further discussion of this issue, see Michael Howard, George, J. Andreopoulos, and Mark R. Shulman, eds., The Laws of War: Constraints on Warfare in the Western World (New Haven: Yale University Press, 1994); and Geoffrey Best, *War and Law Since 1945* (New York: Clarendon Press, 1994). **Back.**

Note 70: Nuclear weapons were tremendously useful at Hiroshima and Nagasaki. Tactical nuclear weapons, especially, have been viewed as useful for both deterrent and war-fighting purposes. Not only were chemical weapons used on a massive scale during World War I, but an important British assessment done after the war took it as a "foregone conclusion" that gas "will be used in the future" because no successful weapon had ever been abandoned (Haber, *The Poisonous Cloud*, p. 293). **Back.**

Note 71: During the Vietnam War, the U.S. Joint Chiefs of Staff repeatedly suggested that nuclear weapons might be needed to keep China out of the war. Nuclear attacks would have a "far greater probability of forcing China" to stop an attack than would a U.S. conventional response (Robert S. McNamara, *In Retrospect: The Tragedy and Lessons of Vietnam* [New York: *Times Books*, 1995], p. 111). **Back.**

Note 72: The utility of "mininukes" in contemporary scenarios is discussed in Dowler and Howard, "Countering the Threat"; and Thomas F. Ramos, "The Future of Theater Nuclear Forces," *Strategic Review* 19, no. 4 (Fall 1991): 41-47. **Back.**

Note 73: We thank Scott Sagan for his suggestions on this question. **Back.**

Note 74: Friedrich Kratochwil and John Gerard Ruggie, "*International Organization*: A State of the Art on an Art of the State," *International Organization* 40, no. 4 (Autumn 1986): 753-75. **Back.**

Note 75: Charles Taylor, "Interpretation and the Sciences of Man," in Paul Rabinow and William Sullivan, eds., *Interpretive Social Science: A Second Look*, pp. 33-81 (Berkeley: University of California Press, 1987). **Back.**

Note 76: Even punishment or ostracism for violation of a norm only becomes a possibility that would not exist in the absence of the norm. The norm itself does not determine the reaction but sets the context for how use is interpreted. Murder is seen as a violation, but a murderer sometimes gets off with a year in jail, sometimes gets the electric chair. The norm proscribing murder itself does not determine these outcomes, but they would not be understandable if such a norm were not present. **Back.**

Note 77: Thomas Schelling, "The Role of Nuclear Weapons" (unpublished manuscript, February 1993), pp. 11-12. **Back.**

Note 78: This functional, interest-based explanation would argue that non-use of weapons of mass destruction is entirely consistent with a rationalist interpretation, especially if extended to include the somewhat long-term "rationality" of making norms and institutions worth preserving. **Back.**

Note 79: Causal inference and the study of norms are entirely compatible, but the substantive interests of researcher and research design may not be. In our case we have chosen a subject matter that is meaningful politically but nevertheless violates dictums to study null cases. This is a problem for all empirical research, however. **Back.**

Note 80: We thank the late Richard Smoke for this provocative idea. **Back.**

