Both U.S. policymakers and the arms control community have preferred in the past to consider nuclear weapons issues separately from chemical and biological weapons (CBW). This is not hard to understand. Divorcing the two categories makes it possible for the United States to pursue the complete elimination of CBW while maintaining a nuclear weapons regime that legitimizes U.S. preeminence in an exclusive nuclear club. From the arms control perspective, dealing separately with different weapons simplifies already complex negotiations, and in this particular case frees CBW talks from dependence on progress in the more problematic nuclear sphere.

But these advantages are increasingly illusory. Linkages that have developed across categories threaten to stall arms control progress on all fronts unless they are recognized explicitly and incorporated into the negotiating process.

On paper, the present approach appears to have produced impressive results. The Chemical Weapons Convention (CWC), with 174 signatories to date, and the Biological and Toxin Weapons Convention (BTWC), with 162, represents an overwhelming consensus on outlawing the non-nuclear weapons of mass destruction (WMD). The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is close to universal adherence with 187 members, though it allows five states to possess nuclear weapons (on the understanding that they will work toward their elimination), and though the few non-members include three states that also possess nuclear weapons (India, Pakistan, and Israel).

But it is premature to claim success on any of these fronts. Seven years after conclusion of the CWC, there are still several dozen states that either have not signed, or not ratified, the CWC, and thus are not yet subject to requirements for declaring past or present chemical weapons programs, dismantling such programs, and submitting to international verification measures. The same is true of the BTWC, which in any event has no verification provisions. Many of the non-adherents have explicitly tied their stance to the continued possession of nuclear weapons by other states.

Even more strikingly, the number of CBW programs actually seems to have increased since the 1980s, when
the tepid international response to extensive use of chemical weapons by Iraq contributed to a weakening of the taboo against such weapons. U.S. intelligence sources appear to believe that about 20 nations now possess chemical weapons, against only 8 to 10 before 1980, and that about half of these countries may also have biological weapons (most of these programs also being of recent origin).\(^1\) Most damningly, this list includes many parties to the CWC and the BTWC that have neither admitted the existence of such weapons nor made any apparent move to dismantle them.

Recent revelations about the massive violation of the BTWC by the Soviet Union over two decades are perhaps no great shock, given the intensity of Cold War hostility and the absence of any inspection regime. But the failure of the attempt to disarm Iraq’s WMD—the “noble experiment” to keep all nuclear, chemical, and biological weapons out of the hands of a U.N.-sanctioned regime—has ominous implications for all future arms control efforts. The conditions and sanctions imposed on Iraq at the close of the Gulf War went well beyond the inspection regimes of the NPT and CWC. In theory, the U.N. Special Commission on Iraq (UNSCOM) had unlimited access to Iraqi territory, a situation unlikely to be a part of any voluntary arms control convention. But in practice, it was simply not credible to threaten massive military assault over every single minor act of defiance. Given the nature of CBW, perhaps nothing short of total military occupation would ensure a total absence of such weapons. The Iraqi case demonstrates that it is probably impossible to eliminate such weapons totally when a state is willing to incur huge costs to possess them. Chemical and biological weapons will, unfortunately, still be with us for some time to come. They are the weapon of choice for “outcast” states seeking a quick fix—an easy equalizer—in their struggle for power and prestige.

**INTERTWINED WMD**

In this situation, it is natural that nuclear weapon states come to regard their own WMD as a hedge against CBW threats. The United States, in particular, has increasingly invoked its nuclear arsenal, implicitly or explicitly, as a deterrent to chemical or biological attack. On the other side, non-nuclear states balk at the chemical or biological bans because of either perceived nuclear threats or, most fundamentally, the blatant inequity of the nuclear division of the world into haves and have-nots. Egypt and Syria see their chemical arsenals as a needed counter to Israel’s nuclear capability; they and other Arab states have refused to sign or ratify the CWC until Israel joins the NPT. In the words of an official Egyptian source, Egypt would not sign, “because a country in the region has a nuclear program that is not subject to international guarantees and this country rejects the international efforts to make the Middle East a nuclear free region.”\(^2\) Consequently, Israel also refuses to ratify the CWC pending Arab adherence. Iraq and Libya presumably both see chemical arsenals, at least in part, as an answer to pressure from nuclear superpowers. The Arab League, meanwhile, has reacted to pressure to sign the CWC by offering a draft treaty that would explicitly link the issues by making the Middle East into a zone “free of all weapons of mass destruction.”\(^3\)

North Korea has, under international pressure, presumably relinquished its nuclear option, but has not joined the CWC and is thought to have the largest stockpile of chemical weapons in the region.\(^4\) Taiwan, though a party to the NPT, has not joined the CWC and maintains a chemical arsenal, by most accounts, to neutralize China’s nuclear capability.\(^5\) It is interesting that southern Asian nations near India and Pakistan (Afghanistan, Burma, Cambodia, Thailand) stand out among states that have either not signed or not ratified the CWC.

So long as chemical or biological weapons function as “the poor man’s nuclear weapons,” arms control in the various categories of WMD is intertwined. Wolfgang Panofsky has argued for “dismantling” the very concept of WMD, claiming that nuclear weapons differ qualitatively from CBW in their lethality, the possibility of effective defense, their likely military uses, and their legal status.\(^6\) These differences undeniably do exist, but are in this case beside the point; on a certain level, nuclear weapons share with CBW features that make them, for some nations, a functional equivalent. These nations would probably rather have nuclear weapons, which would serve their purposes better and more efficiently. Then, they might, like most of the nuclear powers, willingly surrender their chemical and biological programs. But as long as that is not possible, CBW will be seen as the best available counter.

What do the various categories of WMD have in common? All can inflict massive and indiscriminate casualties on a genocidal scale without having to overpower opposing armed forces or occupy enemy territory, and
there is (at least so far) no defense effective enough to prevent massive loss of life if the weapons are developed and used to their full potential. Consequently, all have little or no rational military use against an opponent able to respond in kind (and in fact they have been used so far, almost entirely, against opponents unable to retaliate).

It is, therefore, far from irrational for weaker states—even those not faced by an immediate threat—to seek such capability as a hedge against unknown future contingencies. Such capability is not only a means of deterring an actual WMD attack, but also serves to prevent a country being pressured or “blackmailed” (to use the Cold War term) by a state with an unanswerable WMD threat.

More fundamentally, it is self-delusion to think that the exclusive possession of WMD by the five recognized nuclear powers is a situation that can be perpetuated indefinitely in the face of strong objections from states. To preach abstinence in CBW while clinging to a nuclear oligopoly is indeed, as non-Western nations in particular point out forcefully, condescending, discriminatory, and ultimately unacceptable. A typical statement is that by the Egyptian Foreign Minister in 1989:

It would not be logical for the international community to permit to some countries in the most sensitive regions of the world the nuclear option without the least international control, while the same international community demands the total prohibition of chemical weapons. We consider that the progress in the field of the prohibition of chemical weapons is linked to the realization of a parallel prohibition on the level of nuclear weapons.7

Western policymakers need to take such statements more seriously. In addition, the 2000 NPT Review Conference reaffirmed the Article VI commitment to elimination of nuclear weapons, moving it up a notch. Given this position, it is increasingly impossible to separate nuclear arms control from efforts to eliminate chemical or biological weapons. It is time to bring all WMD inside the same tent. In the real world, they impinge considerably on each other. Nuclear arsenals are justified as a hedge against chemical or biological attack, while CBW is pursued as “the poor man’s nuclear weapon.”

Western powers and arms controllers do not have the final say about whether these issues will be linked or not. If other states—and especially those being asked to give up all WMD—choose to link nuclear weapons to CBW in arms talks, then the linkage exists de facto no matter how convincing the intellectual arguments for separating the issues. The bottom line is that the United States, if it is to achieve the goal of truly effective elimination of CBW from the world’s arsenals, must demonstrate a more credible commitment to the eventual denuclearization of the strategic environment, beyond the vague statement of intent in the NPT. With prominent military figures and even such a noted Cold War hawk as Paul Nitze calling for the total elimination of nuclear weapons, this is not an unrealistic fantasy.8 The logical first step would be the reduction of the role of nuclear weapons to deterrence of WMD only, giving up any “first use” against conventional forces or attacks. This is closely related to proposals for a “no-first-use” policy as usually formulated, except that nuclear deterrence would cover chemical or biological threats as well as retaliation to a nuclear attack.

A MODIFIED “NO-FIRST-USE” POLICY

In November 1998, German Foreign Minister Joschka Fischer violated a long-standing taboo by proposing that the North Atlantic Treaty Organization (NATO) renounce use of nuclear weapons except in response to the use of nuclear weapons, adopting a “no-first-use” posture. Predictably, official Washington rallied in defense of the long-established policy of ambiguity, arguing against giving up the option of using nuclear weapons first.9 As unlikely as a Western nuclear response to a non-nuclear attack may be, all U.S. administrations to date have remained glued to the notion that a little uncertainty in such cases is a good thing.

Jack Mendelsohn has recently restated the argument for “no first use,” making a compelling case that “NATO would clearly be better served if it operated under a policy that confined the use of nuclear weapons to core deterrence....”10 The threat of first use was initially defended as a necessary deterrent against the numerically superior conventional forces of the Warsaw Pact. The fact that this threat has been challenged by Germany—the most important non-nuclear state in NATO and the nation most exposed to the hordes from the East—indicates the need to take notice that the Warsaw Pact no longer exists.
Remarkably, the spirited U.S. defenses of existing policy made little effort to paint a credible scenario of continuing conventional threats to Europe. Apart from vague talk about the need to hedge against a revived nationalist Russia at some unspecified future date, such scenarios hardly carry conviction when NATO’s combined defense budgets dwarf those of any potential enemy many times over. Instead, the official justification focused on (in Secretary of Defense Cohen’s words) “any potential adversary who might use either chemical or biological [weapons].”

But this poses a problem: it directly contradicts another cornerstone of declaratory U.S. nuclear policy. Since 1968, the United States has repeatedly pledged never to use or threaten to use nuclear weapons against a non-nuclear weapon state that is a party to the NPT unless it is attacking the United States in alliance with another nuclear nation. Similar statements in almost identical language—known as “negative security assurances”—have been made by Britain, France, China, and the Soviet Union/Russia. “The Principles and Objectives for Nuclear Non-Proliferation and Disarmament” issued by the 1995 NPT Review and Extension Conference noted the nuclear weapons states’ declarations on both positive and negative security assurances. Thereafter, in its 1996 advisory opinion on the legality of nuclear weapons use, the International Court of Justice held unanimously that any use of nuclear weapons “should . . . be compatible” with these assurances. In addition, the nuclear powers, in signing the protocols of the four nuclear-free zone treaties, have made similar commitments not to introduce nuclear weapons into such areas.

Theoretically the negative security assurance would prevent a nuclear response to a chemical or biological attack by a nation such as Iraq, so long as that nation remained non-nuclear and acted alone. U.S. policymakers faced this problem in the Gulf War, when Iraq—emboldened by the anemic international response to its widespread use of chemical weapons against Iran—seemed poised to unleash similar horrors on coalition troops. Since the United States has renounced CBW, even as retaliation in kind, this left only nuclear weapons as a WMD counterthreat. And the solution at the time was indeed to play the nuclear card, despite the existence of a “negative security assurance” that would theoretically rule this out. Secretary of State James Baker reports that he pointedly warned Iraqi Foreign Minister Tariq Aziz of this in his meeting with him on the eve of the Gulf War: “I purposely left the impression that the use of chemical or biological agents by Iraq could invite tactical nuclear retaliation.”

In the aftermath of the Gulf War, this strand of U.S. nuclear policy began to emerge more clearly as a second qualification (the first being alliance with a nuclear weapon state) to the negative security assurance. Obviously, military planners did not feel that the United States should be constrained to a non-nuclear response if its forces or territory were hit by chemical or biological attack. In 1993, the Joint Chiefs of Staff, in an official statement of nuclear doctrine, declared, “the fundamental purpose of US nuclear forces is to deter the use of weapons of mass destruction (WMD), particularly nuclear weapons, and to serve as a hedge against the emergence of an overwhelming conventional attack.” While the focus is still “particularly” on nuclear threats, this clearly is intended to cover other WMD as well. When the United States signed the protocol to the African Nuclear-Weapon-Free Zone treaty in 1996, promising non-use of nuclear weapons against signatories, the White House added a statement specifically exempting any party “using weapons of mass destruction.” In late 1997, a Presidential Decision Directive likewise explicitly reserved the option of using nuclear weapons in response to chemical or biological attacks. The point has been reinforced on numerous occasions in public statements by defense officials; for example in the testimony of Assistant Secretary of Defense Edward R. Warner before the Strategic Forces Subcommittee of the Senate Armed Services Committee on March 31, 1998:

If any nation were foolish enough to attack the U.S., its allies or friends with chemical or biological weapons, our response would be swift, devastating and overwhelming... We are able to mount a devastating response without using nuclear weapons. Nevertheless, we do not rule out in advance any capability available to us.

The Clinton administration has also added another exception in recent statements of this pledge: that it does not apply to NPT-party states if they are not “in good standing.” This is presumably aimed at states such as Iraq and North Korea.

The tenor of official statements in fact reflects a shift in emphasis in nuclear deterrence, away from the unlikely prospect of nuclear attack and toward the more
likely circumstance of chemical or biological threats. It is time to make this additional exception to the “negative security assurance” explicit; nuclear deterrence of CBW may be a defensible policy in current circumstances. However, continuing to reserve the right to initiate nuclear warfare as a “hedge” against the unlikely event of overwhelming conventional assault is a policy that has outlived whatever usefulness it might once have had.

Washington and NATO need to consider a no-first-use posture, but one limited to first use against conventional attacks only. This is, as noted, already the direction of the official justifications of first use focused on the biological and chemical threats. The next logical step would be to universalize the ban against any use of nuclear, chemical, or biological weapons other than in response to the use of nuclear, chemical, or biological weapons by another party. This would eliminate the first use of WMD in response to conventional attack while (for the time being) recognizing that WMD in one category are being maintained to deter WMD in another.

This kind of a modified no-first-use pledge would require a significant change in U.S. defense policy, but perhaps less than imagined. By putting all WMD into one basket and banning first (but not second) use across the board, the contradiction in U.S. policy regarding chemical or biological attack is eliminated. What is surrendered is only the possibility of using nuclear weapons in response to a conventional attack.

It is usually objected at this point that leaving a certain ambiguity about U.S. nuclear intentions, rather than formally foregoing first use against conventional attack, has added deterrent value. Why make the calculations of a would-be aggressor any simpler? But the questionable value of this added deterrence needs to be weighed against the increased security of a world in which the profile of all WMD is dramatically reduced. As the nation enjoying a wide margin of military superiority in conventional arms, the United States should be the last to object to increased reliance on conventional weapons and delegitimization of the “equalizers” sought by weaker nations.

Moreover: under what conceivable circumstances would the United States, with a defense budget more than that of the next six powers in the world (four of them allies), actually initiate the use of nuclear weapons in a conventional conflict? It is almost impossible to construct a believable scenario for such an action. Even NATO’s own 1999 statement of “The Alliance’s Strategic Concept” posits, “The circumstances in which any use of nuclear weapons might have to be contemplated by [the Allies] are therefore extremely remote.” Another indication of this is the withdrawal from Europe of all but one of the 11 U.S. nuclear weapon systems once deployed there.

The shift in the conventional military balance is further underscored by the fact that it is now Russia that has seized on nuclear weapons as a potential response to conventional attack, reneging on the longstanding “no-first-use” policy it had proclaimed when its forces (on paper at least) had an edge over NATO’s. If Russia is indeed now the vulnerable party—a judgment backed by its military performance in Chechnya—then what are the grounds for NATO’s continuing fears of invasion from the east? In fact, the problem now is reassuring Russia that it faces no immediate external military threat, so that the “no-first-use against conventional weapons” pledge can be extended to all nuclear powers (this clearly has implications for issues like NATO expansion and support of secessionists within Russia). In this regard, it is encouraging to note that when Russia renounced its “no-first-use” policy, it still carefully limited potential first use of nuclear weapons to cases of a threat to national existence.

Can a modified “no-first-use” commitment be extended to other non-NATO nuclear weapons states? China is already in the club, having undertaken from the beginning that “it will never at any time and under any circumstances be the first to use nuclear weapons.” Likewise, India announced a nuclear doctrine in August 1999, promising that “India will not be the first to initiate a nuclear strike” and that “India will not resort to the use or threat of use of nuclear weapons against States which do not possess nuclear weapons, or are not aligned with nuclear weapon powers.”

The cases of Pakistan and Israel are more problematic, since both states see nuclear weapons as a hedge against a conventional attack that might threaten national survival. In both cases, the logical approach is to reduce the fear of such an attack by addressing the underlying conflicts through a mix of traditional diplomacy, arms control, confidence-building measures, and outside guarantees. This might prove more difficult for Pakistan than for Israel; while Israel retains an “opaque” nuclear op-
tion as a weapon of last resort against threats to its survival, it has also repeatedly pledged “not to be the first to introduce nuclear weapons into the Middle East,” and has even professed its own version of a regional “nuclear-free zone” (albeit with such stringent conditions that it is a non-starter for now). But more importantly, Israeli nuclear deterrence has, like U.S. nuclear deterrence, shifted in emphasis over the years from fear of losing a conventional war (a diminishing threat) to neutralization of WMD (especially chemical weapons) in the hands of hostile states. At some point the idea of a modified “no-first-use” agreement, encompassing possessors of chemical and biological arsenals, will become an attractive proposition from Israel’s perspective.

A STEP-BY-STEP APPROACH

All of this needs to be seen in a broad historical perspective. Since the 1920s, nations have been engaged in a process of stigmatizing genocidal weapons, successfully limiting their use to isolated cases. The Geneva Protocol of 1925 outlawed the use, but not the production or possession, of chemical or bacteriological weapons; most parties also reserved the right to retaliate in kind. This was, in other words, a kind of no-first-use pledge covering the WMD that existed at that point.

The BTWC and the CWC represent a further step in stigmatizing non-nuclear WMD, outlawing possession as well as use and in theory eliminating the “second use” of such weapons (retaliation in kind). The stigmatizing of nuclear weapons has not progressed as far. Even though more nations have actually given up possession or use of these weapons, the five recognized nuclear weapon states have made only middling progress toward fulfilling their commitment to work for elimination of nuclear weapons. Moreover, three non-recognized nuclear weapon states have joined their ranks, and other potential proliferators (all of them parties to the NPT!) are on the horizon. Further progress seems blocked by, among other things, the attempt to treat nuclear weapons by different criteria and the failure to recognize de facto linkages across categories of WMD.

In these circumstances, the next logical step in the process of stigmatizing and eliminating WMD would be to universalize the ban against any use of nuclear, chemical, or biological weapons other than in response to the use of nuclear, chemical, or biological weapons by another party. At this point, it would make sense to proceed legislatively rather than by voluntary adherence to international conventions. Just as the U.N. Security Council declared in Resolution 255 (June 19, 1968) that any nuclear attack on a non-nuclear state would require the Council to come to the aid of the victim, it could extend this protection to punish any initial nuclear, chemical, or biological attack in a conventional conflict—i.e., any first use of WMD. Furthermore, agreements among states could reinforce the “no-first-use” commitment by requiring appropriate revisions in force structures and doctrines, that is, reducing these forces to a “minimum deterrence” role without first-strike capabilities.

The universalization of “no first use” could then serve as a platform for further progress toward the ultimate goal: the reduction and elimination of all WMD. Once these weapons serve no purpose but to deter the use of like weapons, their elimination, assuming adequate verification, would not threaten the legitimate security interests of any nation. The next step, therefore, would be to reduce WMD levels to the minimum needed to guard against “breakout” by an aggressive state. Finally, if likely levels of concealed WMD are low enough and international consensus is strong enough, it should be possible to rely on overwhelming conventional force to suppress any attempted breakout.

1 E. J. Hogendoorn, on the basis of declassified intelligence estimates, identifies seven nations, in addition to the Soviet Union and the United States, with chemical weapons programs that (according to these sources and others) predated 1980: China, Egypt, France, Iraq, Israel, North Korea, and Romania. Another 12 nations are believed or suspected to have developed such weapons since then: Burma, India, Iran, Libya, Pakistan, Saudi Arabia, South Africa (since dismantled), South Korea, Syria, Taiwan, Vietnam, and Yugoslavia (Hogendoorn, “A Chemical Weapons Atlas,” Bulletin of the Atomic Scientists 53 (September/October 1997), pp. 35-39). Other observers would add to this list Ethiopia (U.S. Congress, Office of Technology Assessment, Proliferation of Weapons of Mass Destruction: Assessing the Risks, OTA-ISC-559 (Washington, D.C.: U.S. Government Printing Office, August 1993), p. 80) and Sudan (Anthony H. Cordesman, Weapons of Mass Destruction in the Middle East, Center for Strategic International Studies, October 4, 1999, <http://www.csis.org/mideast/reports/WMD.html>).


3 “Arab League to Propose Draft Treaty on Weapons,” Agence France-Presse,

