

THE US DECISION TO PRODUCE CHEMICAL WEAPONS

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In 1985, after a sixteen-year moratorium, the United States embarked upon an ambitious program to produce binary chemical weapons. The Reagan administration justified the renewed production both as a necessary deterrent against growing Soviet chemical capabilities and as an important bargaining chip in the ongoing chemical arms control negotiations. Timothy Devine argues, however, that this attempt to pursue a "win-win" approach failed in several key respects. Most significantly, Devine contends that the US decision to recommence production represented an unsuccessful and counterproductive recourse to unilateralism in the international anti-chemical weapons regime.

INTRODUCTION

In 1985 Congress acceded to the Reagan administration's request for authorization of the first chemical weapons productions by the United States since President Nixon had ordered a unilateral moratorium in 1969. These chemical weapons would be of an entirely new generation based on a technology that allows two non-lethal precursor agents to remain separate until the weapon is fired. The precursors mix to form the lethal gas while in flight. These new munitions, called "binary weapons," would replace existing stockpiles which the administration maintained were obsolete, dangerous and of suspect deterrence value, especially in the face of a growing Soviet chemical weapons stockpile. At the same time, the United States was participating in ongoing negotiations to broaden the prohibition on use of chemical weapons embodied in the Geneva Protocol. These negotiations were aimed at achieving a comprehensive ban on the production, stockpiling and transfer of chemical weapons.

The relationship of the US decision to the existing anti-chemical weapons regime and to the negotiations toward a chemical weapons ban reveals the lack of coherence between the articulated goals of the administration in the area of chemical weapons and the negotiation strategy pursued to achieve them. The central question is whether the decision to produce binary weapons can be considered part of the negotiation process, broadly conceived. An analysis of the arguments of the proponents of binary weapons reveals three possible interpretations of the production decision. If the decision is interpreted as part of the US negotiating strategy involved in the pursuit of an effectively verifiable ban on chemical weapons, this would represent primarily

a decision to continue with a multilateral approach in addressing growing chemical weapons concerns. Alternatively, if the decision can be better explained as a traditional security response to a perceived vulnerability to Soviet chemical attack in Europe, it would embody a more pessimistic retreat into unilateralism. However, neither of these polar possibilities is completely satisfactory. The most comprehensive interpretation of the decision to build binary weapons is that it was an attempt by the Reagan administration to create a "win-win" situation. If the Soviet Union felt compelled to move toward the US position on the issue of verification, a satisfactory agreement would be concluded in Geneva to ban the weapons. If this were not the case, the United States would not feel compelled to compromise on this (or any other) chemical arms control issue, satisfied that it had reestablished what it deemed a credible in-kind deterrent against a Soviet chemical attack.

With this perspective, the validity of the assumptions underlying the administration's position appears open to question. The impact of this decision on the broad range of US security concerns in the chemical weapons area exposes the incoherence of negotiation strategy with the administration's goals. Furthermore, both within and beyond the US-Soviet context, the United States has incurred certain "losses" as a result of the decision to pursue a "win-win" strategy.

HISTORICAL BASIS

The anti-chemical weapons regime has its legal roots in a conference at The Hague in 1899, convened at the initiative of Czar Nicholas II of Russia. At this conference some thirty states agreed to "abstain from the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases."¹ At the 1907 Hague Peace Conference, Convention IV included reference to means which were "especially forbidden," including use of "arms, projectiles, or material calculated to cause unnecessary suffering," including chemical weapons.² At the end of the Second Conference, participants agreed that there would be a Third Hague Peace Conference eight years later, but by that time states were meeting on the battlefields in the First World War.

This war introduced new technologies onto the battlefield in a horrific combination of machine guns, barbed wire and, perhaps most frightening of all, poison gas. The German army first used poison gas weapons in the battle at Ypres on April 22, 1915, in an attempt to break the stalemate. The use of these weapons escalated rapidly as each side introduced new poisons, delivery methods and defensive measures. By the end of the war, chemical weapons casualties totaled more than 1.3 million.

As a result of the horror of the World War I experience and the popular revulsion prompted by accounts of returning veterans, newspapers and writers such as Wilfred Owen and Erich Maria Remarque, the Treaty of Versailles

1. Adam Roberts and Richard Guelff, eds., *Documents on the Laws of War* (Oxford: Clarendon Press, 1982), 36.

2. Roberts and Guelff, 2.

and several other documents, including the Washington Treaty of 1922, made several references against chemical weapons. By far the most important document concerning the anti-chemical warfare regime, however, has been the Geneva Protocol of 1925. This document, entitled "Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare," has been called "the oldest multilateral arms control agreement still in effect."³ It states:

Whereas the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids materials or devices, has been justly condemned by the opinion of the civilized world; and

Whereas the prohibition of such use has been declared in Treaties to which the majority of Powers of the world are Parties; and

To the end that this prohibition shall be universally accepted as a part of International Law, binding alike the conscience and the practice of nations . . .⁴

The language of the protocol clearly sought to establish a norm against the use of these weapons. However, several signatories maintained reservations concerning the right to respond in kind to chemical attacks, and the provisions did not include a prohibition of production, stockpiling and transfer of chemical and biological weapons. As a result, the protocol amounted to an international pledge of no first use.

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World War II witnessed both the use of some innovative cruelties of man against man and a precipitous drop in respect for the boundary between soldier and civilian. In addition, millions of people were slaughtered outside the bounds of battle by their own governments. Nevertheless, combatants never resorted to the use of chemical weapons during the war. Many argue that it was deterrence and not any norm or legal prohibition which prevented their use. In fact, this is the classic example on which proponents of chemical

3. Charles Flowerree, "The Politics of Arms Control Treaties: A Case Study," *Journal of International Affairs* Vol. 37 No. 2 (Winter 1984): 271.

4. Roberts and Guelff, 139-40.

weapons deterrence base their case. Senator John Warner (R-Virginia) made the argument rather succinctly in 1982, "I am an old military man myself and I am a firm believer in how it worked in World War II. We had it, they had it, and nobody fired it."⁵ The validity of this assumption has been questioned in a careful study by Frederic J. Brown, who concludes that the norm against chemical weapons use, as manifested in public attitudes, legal prohibitions and military tradition, worked indirectly to keep the planning, training and preparation—i.e., the assimilation—of chemical weapons at levels which made their use less likely. Brown assesses the lessons of the World War II experience as follows: "Added to this primary and most effective restraint of nonassimilation was mutual possession of a credible deterrent force."⁶

President Roosevelt's statement of June 8, 1943, exemplified the historical impact of World War II on US attitudes concerning chemical weapons:

I have been loath to believe that any nation, even our present enemies, could or would be willing to loose upon mankind such terrible and inhumane weapons . . . Use of such weapons has been outlawed by the general opinion of civilized mankind. This country has not used them, and I hope that we never will be compelled to use them. I state categorically that we shall under no circumstances resort to the use of such weapons unless they are first used by our enemies.⁷

This dramatic statement, which also exhibited Roosevelt's personal revulsion against chemical weapons,⁸ was taken to be a recognition of the Geneva Protocol as "customary international law" and to signify the US commitment to the norm of no first use, in the absence of US ratification of the protocol (which did not occur until 1975). Even without clearly enunciated rules and procedures, the international anti-chemical weapons regime appears to have developed a fairly well-articulated norm against, at least, first use.

Negotiations in Geneva

Hungary reopened the movement for the banning of chemical weapons in 1966 when it submitted a resolution to the United Nations General Assembly, prompted by the use of herbicides in Vietnam by US forces. By the time references to the question of whether the United States was violating the precepts of the Geneva Protocol were removed, the resolution's main point was a call for "strict observance of all States of the principles and objectives

5. "Department of Defense Authorization for Appropriations for Fiscal Year 1983," United States Senate, Subcommittee on Strategic and Theater Nuclear Forces, Committee on Armed Services, 15 March 1982, 4737.

6. Frederic J. Brown, *Chemical Warfare: A Study in Restraints* (Princeton: Princeton University Press, 1968), 298.

7. Brown, 264.

8. FDR had denounced chemical weapons earlier in less vehement language in the Chautauqua Address of August 14, 1936. Cited in Brown, 125.

(norms) of the Protocol”⁹ Passing by 107 votes to none with two abstentions, Resolution 2162 B (XXI) restated the norms of the Geneva Protocol, bringing in many states that were not at the time Parties to the protocol. More importantly, this resolution set in motion multilateral negotiations to establish a set of norms against chemical weapons use with a solid complement of rules and procedures.

When the Nixon administration determined in 1969 that the United States would renounce unilaterally the production and possession of biological arms, the administration pushed for a convention under the auspices of the United Nations. The Soviet Union’s eventual agreement to split the chemical from the biological arms control efforts led to the Biological and Toxic Weapons Convention (BWC) of 1972. This treaty committed signatories to renounce the possession, production, and transfer of biological weapons and to destroy the vast majority of existing stockpiles. Article IX of the BWC committed states to continue “negotiations in good faith” toward a comprehensive chemical weapons convention.¹⁰ This treaty did not include a stringent verification provision, largely because the United States had renounced the weapons and did not feel compelled to push the Soviet Union on this issue. Furthermore, according to negotiator Charles Flowerree, “a stringent verification regime was not considered necessary in view of the dubious military utility of these weapons.”¹¹

In the meantime, however, efforts in the chemical realm moved much more slowly. Some headway was made in 1975 when President Ford clarified the scope of the Geneva Protocol to exclude a few non-hostile uses of herbicides and riot control agents from coverage, which allowed the United States to ratify the Geneva Protocol at the same time as it ratified the BWC.

However, the United States sought to strengthen multilateral structures against chemical warfare, especially in the wake of the use of chemical weapons during the war in Yemen in 1973. In the spirit of détente the United States and the Soviet Union agreed to begin bilateral negotiations aimed at achieving a Chemical Weapons Convention (CWC). After two years of preparatory talks, these negotiations began in 1977 but were broken off by the United States in February 1981. Flowerree offers this assessment:

It would be wrong to say that there was no progress in the later stages, even on the thorny verification problem, but it would be equally wrong to say that the shape of a final agreement was in sightAs far as the US negotiators could see, the pressures on the Soviets to reach an agreement were not great.¹²

As the 1980s began, the Reagan administration hoped to force the Soviet Union to display its intransigence in the areas of on-site inspection and

9. SIPRI, *The Problem of Chemical and Biological Warfare* (Stockholm: Almqvist & Wiksell, 1973), 121.

10. Matthew Meselson, ed., *Chemical Weapons and Chemical Arms Control* (New York: Carnegie Endowment for International Peace, 1978), 126.

11. Flowerree, “Case Study,” 274.

12. *Ibid.*, 276.

verification by moving completely into the multilateral Conference on Disarmament (CD).

While the bilateral negotiations proceeded in this start-stop manner, a framework for multilateral discussion of arms control was evolving in Geneva. The original 1960 Ten Nation Disarmament Commission became the Eighteen Nation Disarmament Commission two years later. In 1969 membership expanded again and the name was changed to the Conference on the Committee on Disarmament. Membership has continued to expand so that there are currently forty nations represented in what is called the Conference on Disarmament. This multilateral body continues to deal with the entire range of disarmament issues in the nuclear and conventional areas as well as the chemical and biological.

The Conference on Disarmament has been very effective in its efforts to achieve a Chemical Weapons Convention for two reasons. First, elaborations of the outlines and myriad technical considerations of any potential convention have been worked out within this context. Nations which do not possess chemical weapons have been free to initiate important propositions in this framework. Examples include the Japanese proposal of an "International Verification Agency" in 1974 and the British concept of an international organization to monitor chemical arms control compliance in 1985. The Netherlands, and more recently, France (which possesses a chemical weapons stockpile), also have contributed to the CWC efforts within the Conference on Disarmament.

Second, the conference has served as the only connection between the United States and the USSR in chemical warfare concerns during periods when bilateral negotiations were suspended. In this sense, the Conference on Disarmament kept the prospects for a Chemical Weapons Convention alive through periods of strained political relations. As the Reagan administration and Congress debated the recommencement of the US chemical weapons program, the Conference on Disarmament represented the only forum for discussions aimed at chemical arms control.

THREE INTERPRETATIONS OF THE BINARY DECISION

As discussed earlier, a move toward multilateralism and a retreat into unilateralism are two possible interpretations of the US decision to produce binary chemical weapons. Examining these two interpretations raises the possibility of a third explanation—a "win-win" interpretation. Before analyzing the strengths and weaknesses of each of these possible interpretations, however, a discussion of Julian Perry Robinson's framework concerning the choices facing national policymakers should prove useful.

Robinson, a recognized authority in the field of chemical weapons arms control, has suggested that a state's policymaking in the area of chemical weapons can be understood best in cost-benefit analysis terms as a "barter" between the option of "international collaboration" and "national self-reli-

ance."¹³ The measure of the relative value of each option is, naturally, the degree to which it satisfies the goal of national security. The options represented in this scheme correspond roughly to the "multilateralist" and "unilateralist" interpretations. Within this framework, the decision to build binaries can be seen as a choice of either international collaboration or national self-reliance as the best means of guaranteeing security against chemical attack. Examination of each interpretation reveals the complexity of such a decision-making process and leads to the development of the third interpretation.

Binary Production as Part of the Negotiation Process: International Collaboration

The US production decision can be considered part of the negotiation process and therefore would represent a choice of international collaboration as the direction for US policy in guaranteeing security in the area of chemical weapons. In this interpretation, the weapons would serve primarily as a bargaining chip in negotiations with the Soviet Union, which had maintained a large production and assimilation program throughout the entire period of the US chemical weapons moratorium. Consequently, the United States can be seen as increasing its power within the negotiation context by reducing the Soviet Union's satisfaction with the status quo. Within this context, the decision to recommence the production of these weapons constituted an affirmation of the American commitment to multilateralism, as represented by the goal of achieving a Chemical Weapons Convention and by the multilateral forum of negotiations.

This interpretation may require a widening of the scope of the definition of "negotiation." In *Negotiating World Order*, Alan Henrikson offers the following thoughts concerning the essential characteristics of the negotiation process:

The key elements to be noted, besides the essential ingredient of communication itself, are the facts that the communication is *explicit*, that it is *reciprocal*, that it takes place *directly* between the parties, that the process is *designed*, that its intended objective is an *agreement*, and that the interests represented in it are in *competition*, a complex relationship which is a mixture of cooperation and conflict and neither purely one nor purely the other.¹⁴

The move to build binary chemical weapons does not directly exhibit the qualities emphasized in this definition. The move was initiated unilaterally, did not necessarily represent explicit communication and was not necessarily directed at Soviet negotiators. Nevertheless, there are ways in which one could interpret the US action as a maneuver toward the goal of international collaboration, and as a strategic repositioning within the negotiation context.

13. Julian Perry Robinson, *Chemical Warfare Arms Control: Framework for Considering Policy Alternatives* (Philadelphia: Taylor and Francis, Inc., 1985), 22.

14. Alan K. Henrikson, ed., *Negotiating World Order: The Artisanry and Architecture of Global Diplomacy* (Wilmington, Delaware: Scholarly Resources, Inc., 1984), xviii.

The administration had been frustrated by Moscow's inflexibility in bilateral negotiations. While there is some disagreement concerning the amount of progress achieved prior to the decision to break off these negotiations at the beginning of Reagan's first term, the following report by the Joint Chiefs of Staff (JCS) reflects a deepening frustration:

[P]rogress in the US/Soviet talks during the past year and a half has not been substantive. Although agreement on various minor issues is possible, only a substantive shift by one of the parties on major issues, such as on-site inspection . . . and verification of stocks and facilities would justify an optimistic outlook in the near future.¹⁵

The following statement by Kenneth Adelman, head of the US Arms Control and Disarmament Agency (ACDA), reflected the administration's position regarding what was necessary to reach such a "substantive shift" and thus to conclude a satisfactory Chemical Weapons Convention in Geneva: "Success on banning chemical weapons will depend on the strength of the American bargaining position."¹⁶ Adelman refers to the production of binaries as strengthening the US "bargaining position" and argues that it is not only the achievement of American desires that rests on a strong US position, but the success of the negotiations as a whole. Adelman maintains that the production of binary weapons was a necessary part of the negotiation process.

In testimony before the US Senate Subcommittee on Strategic and Nuclear Forces in 1982, Richard N. Perle, Assistant Secretary of Defense for International Security Policy, stated,

I believe that our best hope at this time . . . of avoiding the likelihood of chemical use against us and our allies lies in our efforts to seek a ban through multilateral discussions and negotiations in the Committee on Disarmament.¹⁷

To achieve this, Perle further explained that

The administration believes that we need a persuasive prod, if you will, to get the Soviets to negotiate seriously about chemical weapons verification and compliance.¹⁸

The "prod" was, of course, the binary chemical weapons for which the Pentagon was requesting appropriations. In this sense, although not explicit verbal communication, the production decision can be seen as part of the negotiation communications, as a signal to Soviet negotiators of US commitment. Whether this would be "an expensive signal," as Senator Irving Pryor (D-

15. Amoretta M. Hoerber, *The Chemistry of Defeat: Asymmetries in US and Soviet Chemical Warfare Postures* (Cambridge, Massachusetts: Institute for Foreign Policy Analysis, Inc., 1981), 19.

16. John H. King, "The Comprehensive Chemical Weapons Ban," *Arms Control Today*, September 1986, 20.

17. "Department of Defense Authorization," 4732.

18. *Ibid.*

Arkansas) argued in the Senate hearings,¹⁹ has important implications for any further examination of the possible impacts of such a decision.

Statements and actions other than the professions of administration officials when requesting funds also support this interpretation. Although the United States terminated talks with the Soviet delegation in Geneva in 1980, the administration remained very much involved in the multilateral Conference on Disarmament negotiations. In April 1984, Vice President George Bush submitted a draft convention to the conference, outlining what he called "a package of sound and reasonable procedures" including "an entirely new concept for overcoming the great obstacle that has impeded progress in the past toward a full chemical weapons ban—namely, the issue of verification."²⁰ General reaction to this proposal was mixed. The Soviet press, however, described the draft as "absurd and unacceptable."²¹ In seeking to address an issue of contention between the United States and the Soviet Union, this treaty proposal can be considered as a concrete example of a continuing US commitment to communication, thus sustaining the context of negotiation and the possibility of multilateral progress toward chemical arms control.

A few other possible bases of this interpretation of the binary decision as part of the negotiation process concern observations about the weapons themselves and the lack of deployment arrangements. One of the technical complications of the disarmament proceedings has been that the destruction of unitary chemical weapon stocks is complex, expensive (estimated variously at between \$1.5 and \$15 billion for US stocks) and time-consuming (requiring up to ten years). The two precursor elements which make up the nerve agent in the binary weapon are relatively non-lethal and are stored separately, making them easier to dismantle in case agreement on a ban is reached. Consequently, the obstacle to a prolonged period of insecurity during a transition from deterrence to universal nonpossession would be diminished. In this sense one could argue that binaries are weapons well-suited for the role of a bargaining chip.

Finally, one could argue that the Reagan administration's decision to push ahead with the production of the new weapons before securing agreement with European allies concerning forward deployment represented a hope that by the time the weapons were produced, agreement on a ban would obviate the need to force this politically volatile issue on US allies.

Binaries as Traditional Deterrent: National Self-Reliance

The decision to recommence the US chemical weapons production program by authorizing the construction of binary weapons also can be interpreted as a traditional national security response to a perceived vulnerability to Soviet chemical attack in Europe. The continued growth of Soviet stockpiles, the

19. *Ibid.*, 4736.

20. Vice President George Bush, "Address before the Conference on Disarmament, April 18, 1984," *The Department of State Bulletin*, June 1984, 40.

21. "Chemical Arms Offer Condemned by Soviets," *The New York Times*, 21 April 1984, 3.

assimilation of chemical weapons into the training and exercises of Soviet and Warsaw Pact forces and the chemical-defensive characteristics built into Soviet military equipment suggested to many US observers that "the Soviet Union may be preparing to use a powerful new generation of poison gases in any future war in Europe."²² The decision to produce binary weapons, according to this interpretation, can be understood best as a strategic decision based on confidence in a credible in-kind deterrent force as the most effective way to protect against chemical attack. The goal of the decision—the prevention of chemical weapons use against the United States or its allies—remains the same no matter how one may interpret the intentions of the decision-makers. In this "unilateralist" interpretation, however, the production of binary weapons cannot be regarded as an expression of optimism regarding multilateral efforts to achieve security in this realm. On the contrary, the binary weapons decision appears to be a retreat into what Robinson calls "national self-reliance" as the basis of US chemical warfare policy.

If the decision to build binary weapons is based upon a commitment to the protection offered by a credible deterrent, then the negotiations in Geneva are either irrelevant or political "cover" . . .

Such an interpretation minimizes, at least, the relationship between the production decision and the ongoing efforts in Geneva and at most reverses it. If the decision to build binary weapons is based upon a commitment to the protection offered by a credible deterrent, then the negotiations in Geneva are either irrelevant or political "cover" for the controversial arms production request.

According to this unilateralist interpretation, the security concerns of policymakers in the early 1980s and the related arguments in favor of binary production led the Reagan administration to embrace the national self-reliance approach over the option of international collaboration. A consideration of some of the expressions of intent which reflect a much smaller commitment to the negotiation process offers further support for this interpretation.

Several studies in the early 1980s warned of the increasing imbalance between Soviet and US capabilities in the area of chemical weapons. The danger of the imbalance, observers feared, was that the level of the deterrence

22. Orr Kelly, "Why Reagan Seeks Buildup of Chemical Arms," *U.S. News and World Report*, 22 February 1982, 28.

capability of existing US stocks would no longer be high enough to minimize "the range of options which could produce a favorable outcome for an initiator of chemical warfare."²³

One side of the argument emphasized the declining state of the US chemical weapons stockpile as a result of the self-imposed moratorium on production begun in 1969. For example, Adelman noted, "Not even deterrence remains what it once wasThe present US stockpile of chemical agents is largely obsolescent and deteriorating."²⁴ The US Army continued to assess the US stockpile in similar tones in annual requests before Congress for authorization to build chemical weapons. US stocks of lethal chemical munitions totaled around 150,000 tons,²⁵ much of which the army claimed were obsolete and in danger of deteriorating. In addition, although US defensive technology for masks and clothing was considered extremely effective in reducing military casualties when properly employed, US troops were found to be trained minimally in chemical battlefield circumstances.

The Soviet chemical warfare threat was measured principally by estimates of the size of their chemical stockpile, the design of related equipment and the degree to which chemical weapons were seen to be assimilated into Soviet warfighting capabilities. Although details are difficult to ascertain, most estimates of the Soviet chemical stockpile are in the range of 300,000 tons. In terms of equipment, Soviet tanks captured by Israel in the 1973 Arab-Israeli War revealed a highly developed ability to continue operations in a contaminated battlefield. In addition to the 80,000 troops devoted exclusively to the prosecution of chemical warfare, intelligence reports have indicated that all Soviet and Warsaw Pact troops exercise regularly in full protective gear. Consequently, US policymakers were presented with reports of a high degree of Soviet assimilation in addition to its huge stockpile. Whereas chemical weapons are not necessarily lethal when employed against well-equipped troops, their main military advantage lies in the reduction of the effectiveness of troops encumbered by masks and protective gear. The high level of Soviet preparation in military circumstances which favored the initiator of chemical use indicated to some observers more than a purely defensive intention. The difficult proposition of determining intention based upon capabilities did not prevent some observers from painting a very disturbing picture of the asymmetry in chemical warfare postures and the potential danger for US and NATO defenses in Europe.

Contemporary literature presented a range of security options, from enhanced protective-defensive capabilities to increased reliance on nuclear retaliation as a chemical weapons deterrent. One message to policymakers was emphasized more strongly than the others:

23. Hugh Stringer, *Deterring Chemical Warfare: US Policy Options for the 1990s* (McLean, Virginia: Pergamon-Brassey's, 1986), x.

24. Kenneth Adelman, "Chemical Warfare: Restoring the Taboo," *Orbis* (Fall 1986): 447.

25. Matthew Meselson and Julian Perry Robinson, "Chemical Warfare and Chemical Disarmament," *Scientific American*, April 1980, 204.

The crucial step in negating the potential force multiplication effect of Soviet chemical use is for the West to acquire a sufficient CW capability to force the Warsaw Pact into the same, or perhaps even a more burdensome, protective posture, thus raising the cost to the Soviets of initiating chemical warfare.²⁶

The central question is to what degree this reasoning motivated the decision to build the binaries. Before a Senate subcommittee in 1982, Perle stated that the ultimate goal of the administration was an effective and verifiable ban on chemical arms, but "until such a ban can be obtained our objective, consistent with existing treaties and international law, will be to deter the use of chemical weapons by possessing a credible capability."²⁷

Perle's statement indicates that the goal was a chemical weapons ban and the weapons production was simply a short-term security measure. However, language concerning the administration's confidence in the negotiation route is revealing. In *The Chemistry of Defeat*, newly appointed Principal Deputy Assistant Secretary of the Army for Research, Development and Acquisition Amoretta Hoerber concluded her summary by stating,

A credible threat of retaliation in kind must be reestablished and maintained until an acceptable international agreement is reached, whether it is forthcoming in the near future, the longer term, or not at all.²⁸

This "not at all" possibility is reflected in Perle's interpretation of the Soviet Union's motive in negotiations. He argued that the Soviet Union was perfectly willing to continue negotiations indefinitely as it saw the possibility of postponing a US decision to modernize its chemical weapon stockpiles.

In addition to these reservations regarding the possibility of concluding a satisfactory chemical weapons agreement with the Soviet Union, the Sverdlovsk and Yellow Rain issues had a profound impact on the attitudes of members of the US administration concerning the value of multilateral agreements in guaranteeing security. In April 1979, a strange outburst of anthrax occurred in the area of Sverdlovsk, a location of Soviet biological weapons research and development laboratories. Also, Hmong tribesmen in Laos reported a yellow rain coming from the sky and poisoning their villages. The United States charged the Soviet Union with violating the Biological and Toxic Weapons Convention by producing biological weapons in Sverdlovsk and supplying the Vietnamese with toxic weapons in Southeast Asia. Whatever the objective reality of these controversial cases, the administration lost a great deal of any confidence it may have had in negotiating arms control with Moscow. Presenting the 1984 draft treaty at Geneva, Vice President Bush referred *inter alia* to alleged Soviet violations of the 1925 Geneva Protocol

26. Hoerber, 63-64.

27. "Department of Defense Authorization," 4732.

28. Hoerber, xiii.

and the BWC and hinted at the connection between this issue and the US approach to negotiations:

In the last three years alone, the world has heard frequent reports of violations of these agreements from such places as Southeast Asia, Afghanistan, and the Middle East. One important reason that chemical weapons use continues is that neither the 1925 Geneva Protocol nor the 1972 Biological and Toxic Weapons Convention includes any form of effective verification or enforcement.²⁹

Thus, even at the point of offering an arms control initiative, the administration displayed its apprehension concerning agreements with the Soviet Union. Several observers in the administration viewed the BWC as a mistake because it did not include verification or enforcement provisions. The Reagan administration was willing to hold out for a CW ban that provided satisfactory rules and procedures.

The administration went beyond expressing its concern for the asymmetry in chemical warfare capabilities in Europe and the twofold effect this had on the credibility of deterrence and on the defense capabilities of the NATO alliance in the advent of a Soviet chemical attack. The United States also exhibited a marked lack of confidence in negotiations with the Soviet Union. For these reasons, one could interpret the decision to build binary weapons as a decision to rely on unilateral measures in pursuing a secure chemical weapons position.

Limitations

The problem with the interpretations of the binary weapons production decision as a commitment to either unilateral or multilateral policies is that neither approach adequately encompasses the complexity of the decision. The first interpretation overemphasizes the notion that the weapons were to be built to serve as bargaining chips. There is simply too much evidence that there were absolute security concerns involved. Both France and Pakistan, for example, exhibited this same uneasiness by submitting proposals to the Conference on Disarmament aimed at increasing security during the transition from chemical deterrence to a multilateral ban. Furthermore, Perle's testimony separated the production decision from arms control concerns altogether, arguing that the binary decision must be seen as "part of a larger effort by the administration to prevent any further deterioration of our overall military posture."³⁰

Similarly, one cannot discount the US initiatives in Geneva as merely political cover for this controversial request. CD/500, the draft treaty submitted by Vice President Bush in April 1984, was generally well received, despite initially disparaging remarks from the Soviet press. Moreover, Adelman's arguments consistently confirmed the administration's goal of multilat-

29. Bush, 40.

30. "Department of Defense Authorization," 4731.

eral cooperation in the realm of chemical weapons. This divergence of views was not simply a case of ACDA versus the Pentagon: Adelman and Perle both acknowledged each other's concerns and agreed on the proper route and the proper goal in chemical weapons policy.

Two final observations illustrate the limitations of these two formulas for understanding the decision to recommence production. If this choice represented a commitment to an entirely "national self-reliance" approach, the arguments of the proponents would have to indicate clearly that the whole range of security goals in the area of chemical weapons, beyond the equation of European deterrence, had been taken into account. These goals involve articulated concerns about the proliferation, assimilation and strengthening of the norm against chemical weapons use. The national self-reliance option simply is not capable of successfully realizing these goals. This approach did not simply represent a bad national self-reliance decision, however, as the administration was attempting to move beyond the choice between self-reliance and collaboration.

If, on the other hand, the decision represented purely the intention to reinvigorate the arms control/international collaboration option, it would certainly qualify as the long route. Not only did the chief Soviet delegate depict the binary decision as "an attempt to torpedo the process of chemical disarmament and a sign of contempt" for the negotiations,³¹ but the allies wanted nothing to do with the weapons. In the absence of bilateral negotiations, the communication value of the decision would have been lessened as well. Was it then simply a badly designed effort at international collaboration? This interpretation also seems to fall short. Again it appears that the administration was reaching for a wider and more flexible formula in dealing with chemical weapons.

The administration apparently was seeking both to reestablish what it believed would be a credible in-kind deterrent against the Soviet Union and to push forward in the multilateral realm, which was essential to address concerns beyond the European equation.

Binaries as Both "Deterrent and "Prod.": The "Win-Win" Interpretation

The shortcomings of the two preceding interpretations suggest a third possibility. Although these two interpretations may be considered polar possibilities, the third does not necessarily represent a compromise between the two but requires instead a widening of the scope of analysis. Robinson's model of the national security decision-making process as a "barter" between the options of national self-reliance and international collaboration suggests that policymakers faced an "either/or" decision in the chemical weapons arena. According to this model, one must either understand the decision as a move toward national self-reliance in which the binaries were built as a response to a dangerous imbalance, or view the decision as a move toward international

31. "Progress continues on text for chemical weapons ban," *UN Chronicle*, June 1988, 26.

collaboration in which the weapons were produced as a long-term maneuver to achieve multilateral agreements providing mutual security. This framework is helpful in qualifying the "bargaining chip" and "political cover" interpretations but neglects the possibility that the production of the binaries could have been intended to create a more flexible situation enabling the implementation of both policies. In other words, the decision to produce chemical weapons did not constitute a trade-off of two positions: the US administration could pursue both objectives simultaneously. An examination of the evidence from this perspective indicates that the dual-approach interpretation is more satisfactory than either of the first two.

The intention of the administration . . . was to create a "win-win" situation in which either of two outcomes would be acceptable.

The language of President Reagan's written request to Speaker of the House Thomas O'Neill (D-Massachusetts) in February 1982 for House authorization for binary weapons is revealing. Certifying that "the production of lethal binary chemical munitions is essential to the national interest," Reagan opened this letter with a confirmation of the US policy of no first use and the US goal of banning chemical weapons. Reagan then outlined the dual role of binaries in US policy. These weapons, Reagan argued, would enable the United States to "deter chemical warfare by denying a significant military advantage to any possible initiator" and "provide strong leverage towards negotiating a verifiable agreement banning chemical weapons."³² While one might contend that the reference to leverage was purely rhetorical, these remarks could also be considered a sincere commitment to Reagan's strategy of negotiating from a position of strength. Indeed, Adelman illustrated clearly the interaction between these two policies:

The tendency in debating the chemical weapons issue in the West is to emphasize one side of the equation—either arms control or deterrence—at the expense of the other. But the fact is that the objectives do interact. International law plays a critical role by defining a "firebreak" between conventional and chemical warfare, by demarcating an area of taboo. International cooperation is also essential to achieve further legal control of these weapons, through a comprehensive treaty, and to address the dangers of CW proliferation. However, until a comprehensive treaty has been concluded

32. Ronald Reagan, letter to Speaker of the House of Representatives, 8 February 1982.

and implemented fully, deterrence remains absolutely necessary—not only to minimize the probability of use in the event of hostilities (given the horror of modern chemical and biological agents, the importance of this function should never be underestimated), but also to provide leverage for strengthening the norms of responsible behavior.³³

In short, the administration was pleased with the open-ended prospects created, as it had predicted, by the binary decision. The intention of the administration, one might then argue, was to create a “win-win” situation in which either of two outcomes would be acceptable. If the Soviet Union responded to the new position of strength by making concessions in the critical area of verification, the United States could agree to a satisfactory ban, eradicating virtually all security problems related to chemical arms. On the other hand, if Moscow remained intransigent on this issue, the United States would have at least restored a chemical deterrent and shored up European defenses. As a result of this decision, the Reagan administration believed that the United States could await the Soviet response from a safer and more powerful negotiating position.

THE BINARY PRODUCTION DECISION: US CHEMICAL WEAPONS SECURITY CONCERNS

In response to the Reagan administration’s chemical weapons policy, Senator Pryor stated in 1982 that production of binary weapons was a costly means of signaling Soviet negotiators. An assessment of the validity of the administration’s “win-win” assumption concerning binary production reveals two ways in which this policy was costly. In the areas of both norms and proliferation, the production decision represented a “loss” to articulated US security concerns regarding chemical weapons.

Norms

In “Chemical Warfare: Restoring the Taboo,” Adelman argues that

It behooves us to see what we can do to restore the barriers to chemical warfare before the half-century-old taboo against use of these brutal weapons is again shattered³⁴

The taboo to which Adelman refers might be either of the two existing norms in the anti-chemical warfare regime: the norm against use and the norm against first use.

There are two levels to the norm against the general use of chemical weapons. The first level encompasses the visceral, emotional and psychological

33. Adelman, “Chemical Warfare,” 447.

34. *Ibid.*, 455.

revulsion which causes people to describe these weapons as "immoral," "hideous," and "awful" and to refer to their production as a "dark business." This level traces its historical roots to the Western societies' collective memory of the horrors of the First World War. The following excerpt from Wilfred Owen's posthumously published "Dulce et Decorum Est" graphically portrays the panic and horror experienced by a generation of soldiers:

GAS! GAS! quick, boys—An ecstasy of fumbling,
 Fitting the clumsy helmets just in time;
 But someone still was yelling out and stumbling
 And flound'ring like a man in fire or lime . . .
 Dim, through the misty panes and thick green light,
 As under a green sea, I saw him drowning.

In all my dreams, before my helpless sight,
 He plunges at me, guttering, choking, drowning.³⁵

The legacy of this tragic use of poison gas continues to buttress the norm against chemical warfare, despite the advent of horribly annihilative non-chemical war technologies.

This norm also has grown out of several other characteristics of chemical weapons. In an age of incredibly destructive "conventional" instruments of killing, there remains a particular horror in the way people die from chemical weapons. Julian Perry Robinson and Matthew Meselson described death by exposure to nerve gas in a rather matter-of-fact style,

intense sweating, filling of the bronchial passages with mucus, bronchial constriction, dimming of vision, uncontrollable vomiting and defecation, convulsions, and finally paralysis and respiratory failure[I]t may take up to several hours for the victim to die.³⁶

People seem to maintain a special revulsion for the agony involved in this manner of death.

Another emotional element of this norm, shared by nuclear weapons, is that only small amounts of material are required to inflict massive human casualties. In some manner, this deeply disturbs the human sense of proportion, which instinctually rationalizes that causing so much destruction should involve much more material.

It is interesting to note that these characteristics of chemical weapons which evoke the visceral, emotional supports of the norm are no longer unique. Other means of warfare seem to have caught up with the horror of chemical weapons. Frederic Brown considers these weapons "an unacceptable anachronism, born too early out of a unique marriage of science and war."³⁷ This is

35. Wilfred Owen, "Dulce et Decorum Est," *The Norton Anthology of Modern Poetry* (New York: W. W. Norton & Company, Inc., 1973), 519.

36. Meselson and Robinson, *Scientific American*, 203.

37. Brown, 298.

perhaps the source of their continuing ability to provoke physical revulsion. However, this emotional repugnance does not provide a logical justification for banning chemical weapons, for in many respects, chemical weapons are no worse than many other types of modern weaponry.

On the other hand, chemical weapons remain distinctive in several important ways. John Isaacs notes that elected leaders who regularly vote for nuclear weapons, cruise missiles and high-tech bombers "blanch at a modest-sized (by Pentagon standards) program to resume production of lethal nerve gas weapons."³⁸ Indeed, each US president since Franklin Roosevelt has proclaimed a no first use policy regarding chemical weapons; none has yet renounced this option in the nuclear realm. To worry about chemical warfare at all in an age of practically evaporated distinctions between civilians and soldiers, massively destructive "conventional" weapons and an ever-present nuclear shadow may be paradoxical, but chemical weapons possess distinct attributes.

The uniqueness of chemical and biological weapons lies in the biospecificity of their destruction. While bullets or conventional and nuclear bombs tear through wood, steel, brick and concrete as efficiently as they tear through flesh and foliage, chemical weapons destroy living things and leave the inorganic infrastructure relatively unmolested.

While bullets . . . tear through wood, steel, brick
and concrete as efficiently as they tear through flesh
. . . chemical weapons destroy living things and
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unmolested.

The other horrifying aspect unique to these weapons is that they are merely tools to degrade the effectiveness of opposing troops, since casualties are virtually eliminated if protective gear is donned rapidly. While soldiers continue to fight, effectively immune to the lethal gas, the unprotected civilian population is at the mercy of the prevailing winds, vulnerable to one hundred percent casualty levels. Robin Clarke refers to chemical and biological weapons as "uniquely anticivilian devices."³⁹

The United States may have wanted to buttress this norm against chemical weapons use but could not have succeeded. By definition, a deterrent must be credible. This means that the moment the United States made its decision

38. John Isaacs, "Nervous About Nerve Gas," *Bulletin of the Atomic Scientist* (December 1983): 7.

39. Robin Clarke, *The Silent Weapons* (New York: David McKay Company, Inc., 1968), xii.

to rely on an in-kind deterrent, it promised, however reluctantly, that it would use these weapons under certain circumstances. This reliance, and the implicit willingness to resort to chemical weapons, is an ongoing refutation of the norm against their use.

In addition, one must consider the effect of the debate itself on this norm. In *The Silent Weapons*, Clarke furnishes a logical argument against chemical and biological weapons:

The old World War I emotional reaction against chemical weapons will no longer do . . . The emotional reaction may be instinctively right but it is logically wrong. Many weapons are more horrifying in their effects than chemical ones.⁴⁰

Perle opened his testimony before Congress in 1982 with similar language when he stated, "I think it is crucial to give this increasingly emotional subject—chemical warfare—the kind of dispassionate attention that the issue deserves."⁴¹ The subtle danger is that even if these emotional reactions are illogical and anachronistic, they represent the principal buttresses of the norm against chemical weapons use. In attempting to analyze them comparatively and rationally, one actually is undermining a solid basis of the anti-chemical regime.

Alternatively, one might consider the second taboo which Adelman sought to strengthen—the norm against first use. This is quite different from the more comprehensive norm against any use because it justifies the production and stockpiling of chemical and biological weapons. The US decision to build binary weapons did not directly attack this norm, but the question arises as to whether binary weapons would strengthen the norm against first use by reducing the range of situations in which an adversary would profit from such use. Although the binaries may have succeeded in reducing the range of potential initiation, they have not strengthened the norm. The US declaration of the no first use policy is the basis of that norm. Having the in-kind deterrent does nothing to strengthen that pronouncement, and thus nothing to strengthen the norm.

Proliferation

The administration's growing concern over the horizontal proliferation of chemical weapons reflected its apprehension toward the weakening of the norms of the anti-chemical warfare regime. Over the last twenty years the number of nations possessing chemical weapons has grown from five to approximately fifteen. As in the case of nuclear arms, the general belief is that the more countries possessing chemical weapons, the more likely is their use. With this in mind, Adelman argued in favor of building the binary weapons:

40. Clarke, 4.

41. "Department of Defense Authorization," 4731.

If there are a lot of crazy countries in the world that have chemical weapons and have not agreed to ban them, it makes no sense for the United States to give up a deterrent chemical weapons force.⁴²

Such statements indicate that the administration was also greatly concerned with the increasing instability and greater probability of use associated with the proliferation of chemical weapons. Representative Dante Fascell (D-Florida), Chairman of the US House Committee on Foreign Affairs, asked the Congressional Research Service (CRS) to study the potential impact of binary weapons production on chemical weapons proliferation. Fascell summarized the CRS report with the following statement:

This comprehensive study points out that a decision to modernize present US offensive chemical warfare capability by producing binary chemical weapons undermines a variety of military, technical, political, psychological and moral constraints that to date have generally inhibited countries from producing or using chemical weapons.⁴³

Some of these undermined constraints include a lowered safety requirement for those chemical weapons plants producing binaries, as the relatively non-lethal precursors of these munitions are produced separately; a "demonstration effect" that somehow these weapons must have increased in military utility in order for the United States to break its fourteen-year moratorium; and a renewed interest in the possibility of acquiring these weapons as a way station on the route toward nuclear capabilities.

The conclusions of the CRS report have a slightly more cautious tone:

Binary production is an important factor vis-à-vis the proliferation of chemical weapons, but nonetheless just one of many factors US actions might be influential, but not all of the factors which would affect CBW proliferation are amenable to US control.⁴⁴

Regardless of the conclusions of these experts, the "win-win" assumption clearly has proven unrealistic in this arena of chemical security. Indeed, the focus of a 1988 speech by Kathleen Bailey, Assistant Director of ACDA, suggests that the direction of US policy in this realm might be changing. Bailey spoke at length about "export controls" and "chemical warning lists" to ensure that private companies maintain their commitment to combat proliferation. Bailey concludes by reaffirming the US policy to pursue a comprehensive Chemical Weapons Convention, but in the interim, she argued, "a complementary program of action to inhibit the illegal use and

42. Michael R. Gordon and Paul Lewis, "The Move to Ban Chemical Weapons: Big Strides and Many More Hurdles," *The New York Times*, 16 November 1987, A3.

43. Congressional Research Service, *Binary Weapons: U.S. Chemical Weapons Stockpile Modernization Program for Chemical Weapons Proliferation*, 1983, iii.

44. *Ibid.*, 30.

dangerous proliferation of chemicals" would be necessary.⁴⁵ These comments suggest that US chemical weapons policy might be heading in a new unilateral or "alliance-based" direction, signifying that the dual produce-and-negotiate "win-win" strategy had proven unworkable.

CONCLUSION

If the approach of the Reagan administration toward security in the realm of chemical warfare was appropriate, then the results of the two policy objectives—enhancing the US negotiating position and creating a critical chemical weapons deterrent—should include successes in one or both of these areas, or at least should have not produced any negative effects. An item-by-item evaluation, however, reveals that the course of action chosen by the Reagan administration has had a negative impact in several important areas of concern.

Deterrence credibility: By definition, the establishment of a credible deterrent is dictated by the adversary's action or inaction. Moreover, even if the adversary does not act, one may not determine if this deterrent is what prevented the action. The Reagan administration succeeded in obtaining NATO approval for the binary weapons program only at the cost of increasing tension within the alliance. The binary decision regarding deterrence, therefore, has produced mixed results.

Leverage: In terms of prodding the Soviet Union at the negotiating table in Geneva, the results are equally ambiguous. Unless an arms control agreement is reached, one can only gauge the effectiveness of the chemical weapons as leverage by noting that four years after production was authorized, negotiations continue. One can note further that the motive previously imputed to the Soviet negotiators by Richard Perle—to frustrate US efforts to modernize weapons stockpiles—must have changed, because the Soviet Union is still at the negotiating table and production of the US weapons is under way.

Impact on regime norms: The effects of the binary production decision on the chemical weapons "taboo" is much clearer. As discussed earlier the decision to build binaries essentially attacked the norm against the use of chemical weapons and was, at best, irrelevant to the strength of the norm against the first use of chemical weapons. Consequently, the overall impact on these norms has been counterproductive.

Impact on chemical weapon proliferation: Although difficult to determine decisively, the cumulative effect of the US decision apparently has tended to accelerate the proliferation process both technically and politically.

The preceding analysis reveals that the "win-win" assumption was not only unrealistic, but also suffered from a narrow focus that failed to cover the administration's own range of security concerns. Furthermore, the attempt to move in a direction of self-reliance while remaining involved in international collaboration efforts resulted in the surrender of the initiative in the arena of chemical weapons arms control. The United States effectively removed itself

45. Kathleen Bailey, "Chemical Weapons Proliferation," a speech delivered on July 16, 1988. Recorded in *Vital Speeches of the Day*, 24 October 1988.

from the lead position in the negotiation process. William Zartman has described negotiations as "a *positive-sum* exercise, since by definition both parties prefer the agreed outcome to the status quo or to any other mutually agreeable outcome."⁴⁶ In this light, once the administration satisfied itself that it had reestablished a credible deterrent with respect to the Soviet Union, the incentive to reach an agreement diminished. The initiatives of the two Germanies and the Soviet stockpile reductions attest to the fact that the United States lost the opportunity to lead in this area.

Clearly, these binary weapons not only have threatened the anti-chemical weapons regime but have affected adversely the wide range of US security concerns in the realm of chemical warfare. As repeated in the pronouncements of the Reagan administration, the long-term security of the United States could lie nowhere but in a comprehensive multilateral Chemical Weapons Convention. The first step the Bush administration could take to increase the level of US chemical arms security would be to abandon an approach which attempted to kill two birds with one stone, concentrating instead on measures that rest firmly on the multilateral anti-chemical warfare regime.

46. I. William Zartman, ed., *The Negotiation Process: Theories and Applications* (Beverly Hills: Sage Publications, 1987), 70.