BANNING POISON GAS AND GERM WARFARE: SHOULD THE UNITED STATES AGREE?

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The United States Army Field Manual on the Law of Land Warfare states flatly that

the United States is not a party to any treaty, now in force, that prohibits or restricts the use in warfare of toxic or nontoxic gases . . . or of bacteriological warfare . . . . The Geneva Protocol for the prohibition in war of asphyxiating, poisonous, or other gases, and of bacteriological means of warfare . . . is . . . not binding on this country.1

This article will consider whether the principles of the Geneva Protocol have become so widely accepted that they apply to the United States even though it is not a party. It will analyze the effect of existing reservations to the Protocol, discuss the United States use of tear gases and herbicides in Vietnam in light of its provisions, and recommend that the Protocol be approved by the Senate. This article will first describe the international agreements dealing with poison gas and germ warfare, and the reasons which prevented the United States from becoming a party to them.

I. INTERNATIONAL AGREEMENTS DEALING SPECIFICALLY WITH POISON GAS OR GERM WARFARE

A. The Hague Gas Declaration of 1899

The first treaty dealing specifically with poison gas was the 1899 Hague Gas Declaration which contained an agreement "to abstain from the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases."2 Twenty-seven states became parties to this declaration, including all participants in the conference except the United States.3 The American representative, Navy Captain Alfred T. Mahan, refused to agree because gas projectiles were not yet in practical use or fully developed,

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3 Id. at 226.
and because he thought gas warfare was just as humane as other forms of warfare.\(^4\)

The language of this declaration was so limited that it had little if any effect on gas warfare during the First World War. In the first major poison gas attack of the War, at Ypres in 1915, the chlorine gas used by the Germans came from large cylinders, not the "projectiles" described in the declaration.\(^5\) The French used projectiles containing tear gas which they said was not an "asphyxiating or deleterious" gas within the meaning of the declaration.\(^6\) Similarly, a projectile used by Germany did not have "as its sole object" the diffusion of poison gas because, the Germans argued, it was also used for shrapnel.\(^7\) With these and other arguments, the existing limitations on poison gas were brushed aside in the First World War.

**B. The 1919 Versailles Treaty**

The treaty contained the following provision:

> The use of asphyxiating, poisonous, or other gases and of analogous liquids, materials or devices being prohibited, their manufacture and importation are strictly forbidden in Germany.\(^8\)

While the United States failed to give its consent to the ratification of the Versailles Treaty primarily because of its provisions establishing a League of Nations,\(^9\) the quoted language was incorporated by reference in the 1921 Treaty of Berlin between the United States and Germany.\(^10\) But the United States regarded it as only applicable to Germany.\(^11\) World War I treaties of peace

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\(^7\) E. Castren, supra note 5, at 195; Bernstein, supra note 6, at 907. This argument was not, however, the basic justification given by Germany for the use of gas. See Kelly, *Gas Warfare in International Law*, 9 MILITARY L. REV. 1, 39-40 (1960).


\(^11\) The United States' view is necessarily implied by the quotation from the *Army Field Manual* set forth at the beginning of this article. It is based upon the language of article 171 itself, and of the 1921 Treaty of Berlin which incorporated article 171 by reference for the benefit of the United States. See Kelly, supra note 7, at 24 & n.113.
applicable to Austria, Bulgaria, and Hungary contained similar provisions.12

C. The 1922 Washington Treaty on Submarines and Noxious Gases

Drawing on the language of the peace treaties, the Washington Treaty stated:

The use in war of asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices, having been justly condemned by the general opinion of the civilized world and a prohibition of such use having been declared in treaties to which a majority of the civilized Powers are parties,

The Signatory Powers, to the end that this prohibition shall be universally accepted as a part of international law binding alike the conscience and practice of nations, declare their assent to such prohibition, and agree to be bound thereby between themselves and invite all other civilized nations to adhere thereto.13

This provision was based upon a United States proposal and was adopted at the urging of Secretary of State Hughes.14 Perhaps to help achieve later Senate consent, Senator Elihu Root was asked to represent the United States at the conference. In addition Secretary Hughes took pains to have an advisory committee of prominent citizens appointed by President Harding and attempted to mobilize popular opinion behind the treaty.15 As a result, the Senate gave its consent without a dissenting vote.16 French ratification was necessary, however, and the treaty failed because of French objections to its provisions on submarines.

D. The 1925 Geneva Protocol

This protocol added to the poison gas prohibition of the Washington Treaty a ban on bacteriological warfare. It provided in pertinent part:

14 See text at note 116 infra.
15 See R. BUELL, THE WASHINGTON CONFERENCE 206 n.9 (1922); F.J. BROWN, CHEMICAL WARFARE, A STUDY IN RESTRAINTS 64 (1968). Among the members of the advisory committee were Samuel Gompers, Herbert Hoover (then Secretary of Commerce), John L. Lewis, General Pershing, Rear Admiral Rodgers, Franklin Roosevelt (then Assistant Secretary of the Navy), and J. Mayhew Wainright (Assistant Secretary of War).
16 62 CONG. REC. 4723-30 (1922).
Whereas the use of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been justly condemned by the general 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 part of International Law, binding alike the conscience and the practice of nations:

Declare:

That the High Contracting Parties, so far as they are not already Parties to Treaties prohibiting such use, accept this prohibition, agree to extend this prohibition to the use of bacteriological methods of warfare and agree to be bound as between themselves according to the terms of this declaration.17

The Geneva Protocol was adopted at the insistence of the United States.18 However, probably because of the ease with which the Washington Treaty had sailed through the Senate, Secretary of State Kellogg did not make the effort to gain support for the Geneva Protocol that Secretary Hughes had made earlier for the Washington Treaty.19 Although Congressman Burton was the head of the United States delegation, no Senator was included.20 No advisory committee was enlisted. The Army's Chemical Warfare Service was not prevented from mobilizing opposition to the protocol.21 It enlisted the American Legion, the Veterans of Foreign Wars, the American Chemical Society, and the chemical industry.22 Senator Wadsworth, Chairman of the Military Affairs Committee, led the Senate opponents of the protocol.23 He argued that it would be torn up in time of war, and that poison gas was in any event more humane than many other weapons. Senator Borah, Chairman of the Senate Foreign Relations Committee, finally withdrew the treaty from Senate consideration, presumably because he and the Senate majority leader had concluded that they did not have the votes.24

The protocol came into force, however, without the United States.

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17 Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, June 17, 1925; 94 L.N.T.S. No. 2138, at 67 (1929).
18 See text at note 121 infra.
19 See F.J. Brown, supra note 15, at 99.
20 Id.
21 For a history of the activities of the opponents and proponents of the protocol, see id. at 102-08.
22 Id.; see also 66 Cong. Rec. 152-54 (1926).
23 See 66 Cong. Rec. 144-46 (1926).
24 Id. at 368.
It now has over 60 adherents. All members of NATO except the United States, and all Warsaw Pact members, including the Soviet Union, are parties. Indeed, all European states except Albania have joined the protocol. Of the major industrial countries, only Japan and the United States have failed to become parties.

The following states have ratified or acceded to the Geneva Protocol on the dates set opposite their names according to the files of the Department of State: Australia, January 22, 1930; Austria, May 9, 1928; Belgium, December 4, 1928; Bulgaria, March 7, 1934; Canada, May 6, 1930; Ceylon, January 20, 1954; Chile, July 2, 1935; China, August 7, 1929; (On July 13, 1952, the People's Republic of China issued a statement recognizing as binding upon it the accession to the Protocol "in the name of China" on August 7, 1929.); Cuba, June 24, 1966; Cyprus, December 12, 1966; Czechoslovakia, August 16, 1938; Denmark, May 5, 1930; Estonia, August 28, 1931; Ethiopia, September 18, 1935; Finland, June 26, 1928; France, May 9, 1936; Gambia, November 16, 1966; Germany, April 25, 1929; (In 1959 Czechoslovakia transmitted to France, the depositary government, an instrument of adherence from the German Democratic Republic.); Ghana, May 3, 1967; Greece, May 30, 1931; Holy See (Vatican), October 18, 1966; Hungary, October 11, 1952; Iceland, November 2, 1967; India, April 9, 1930; Indonesia, October 31, 1950; Iran, July 4, 1929; Iraq, September 8, 1931; Ireland, August 18, 1930; Italy, April 3, 1928; Latvia, June 3, 1931; Liberia, April 2, 1927; Lithuania, June 15, 1933; Luxembourg, September 1, 1936; Madagascar, August 12, 1967; Maldives Islands, January 6, 1967; Mexico, March 15, 1932; Monaco, January 6, 1967; Netherlands, October 31, 1930; (Accession by the Netherlands included Surinam, the Netherlands Antilles, and the Netherlands Indies [Indonesia].) On December 27, 1949, sovereignty over Indonesia was transferred from the Netherlands to the Republic of Indonesia. The Agreement on Transitional Measures adopted by the Round Table Conference at The Hague on November 2, 1948, provides that treaties and other international agreements concluded by the Netherlands are in force for the Republic of Indonesia.); New Zealand, January 22, 1930; Niger, April 19, 1967; Norway, July 27, 1932; Pakistan, 1947; (Pakistan is a party by reason of paragraph 4 of the annex to the Indian Independence Act.); Paraguay, 1933; (In 1933 Paraguay sent to France a note of accession to the Protocol, but there is no record that France notified the other signatories of the accession.); Poland, February 4, 1929; Portugal, July 1, 1930; Rumania, August 23, 1929; Rwanda, June 25, 1964; Sierra Leone, March 20, 1967; Spain, August 22, 1929; Sweden, April 25, 1930; Switzerland, July 12, 1932; Tanzania, April 22, 1963; (Tanganyika acceded to the Protocol on April 22, 1963. In a note dated May 6, 1964, the United Republic of Tanganyika and Zanzibar informed the U.N. Secretary-General that all international agreements formerly in force between either country and other States would continue in force for the United Republic.); Thailand, June 6, 1931; Tunisia, July 12, 1967; Turkey, October 5, 1929; Uganda, May 24, 1965; Union of South Africa, January 22, 1930; United Kingdom, April 9, 1930; U.S.S.R., April 5, 1928; U.A.R., December 6, 1928; (All international agreements concluded with Egypt remain in force for the United Arab Republic.); Venezuela, February 8, 1928; Yugoslavia, April 12, 1929; (Yugoslavia is a party by virtue of the ratification in the name of the Kingdom of Serbs, Croats, and Slovenes on April 12, 1929. The Kingdom changed its official title to "Kingdom of Yugoslavia" in 1929 and in 1954 to the "Federal People's Republic of Yugoslavia."). The following countries have signed the Protocol but have not ratified it to date: United States, Brazil, El Salvador, Japan, Nicaragua, Uruguay.
Of the nuclear weapon powers, only the United States remains outside the protocol.

Many persons credit the protocol with a major role in preventing gas warfare in Europe during World War II. It symbolized

26 At the beginning of the war, Britain and France reaffirmed their "intent to abide by the terms of the Geneva Protocol ...," assuming Germany did the same. See F.J. Brown, supra note 15, at 210. Britain apparently considered using gas should all other weapons fail to prevent invasion. Id. at 227-29. The protocol, and the revulsion against poison gas which it symbolized, constituted a restraint. But, in the opinion of Major Brown who has examined many of the British internal papers, the fear of German retaliation was the primary deterrent. Id. at 230.

In response to the British and French declaration of intention to abide by the Geneva Protocol, Germany stated it would "observe during the war the prohibitions which form the subject of the Geneva Protocol ...." Id. at 230-31. Germany also considered using poison gas. Major Brown concludes that the three factors which prevented German use of gas were fear of retaliation, the initial abhorrence of gas by key military and civilian decision makers, and a lack of readiness resulting in part from this abhorrence and in part from the ban on manufacture and importation of poison gas in the Versailles Treaty. Id. at 231, 235-45, 293.

In his summary of the restraints in effect on belligerents during World War II, Major Brown concludes that the legal restraints were "moderately effective, but in an unanticipated sense." Id. at 291-94. He believes that the interwar conferences and treaties served to focus renewed public and elite group attention on chemical warfare. This resulted even in military distaste for it, insufficient training and preparation to use it, and strong aversion towards it by high civilian and some military leaders.

The primary value of the legal restraint rests in its tendency to reinforce other restraints. Treaty prohibition, though imperfect, reinforced both public and military dislike and fear of chemical warfare and provided a ready excuse for lack of substantive preparation. Id. at 293.

For views giving greater weight to the effect of the protocol in preventing poison gas warfare in World War II, see, e.g., A. Enoch, This War Business, 100 Geo. L.J. 251, 252 (1982); J. Goodrich, Biological/Chemical Warfare and the International Law of War, 51 Geo. L.J. 1, 35-36 (1962). But see, e.g., Kelly, supra note 7, at 42 (public opinion and the fear of retaliation were the only effective restraints in World War II).

The official Soviet view is that the protocol greatly contributed to the nonuse of poison gas during World War II. See U.N.G.A. Statement of Soviet Representative Tsarapkin, United States Arms Control and Disarmament Agency, 1961 DOCUMENTS ON DISARMAMENT 577 [hereinafter cited as DOCUMENTS ON DISARMAMENT with the appropriate year designated]. Soviet ENDC Representative Roshchin stated in 1968:

The Geneva Protocol set a legal barrier to the use of such [gas and bacteriological] means of mass destruction, and this was of great importance in the Second World War. The warning given by the Powers of the anti-Hitler coalition that the use of gases and bacteriological means of warfare was inadmissible and that a violator would not go unpunished had its effect on fascist Germany. In giving that warning the Powers of the anti-Hitler coalition based themselves on that important international agreement, The Geneva Protocol of 1925.


The official U.S. view puts considerable weight on the effect of the declaration threatening retaliation against any use of gas by enemies of the United States, a declaration which was made by President Roosevelt in
the abhorrence for gas which even military men had after World War I. This abhorrence contributed to restraints imposed by both civilian and military leaders. If retaliation was the primary sanction acting to deter the use of poison gas and germs, the protocol established the norm of conduct. Unlike World War I, no gas warfare occurred among the industrial states of Europe.

II. INTERNATIONAL LIMITATIONS ESTABLISHED BY CUSTOM

The foregoing brief history has shown that the United States is not a party to any treaty which expressly prohibits it from engaging in gas or bacteriological warfare. To this extent, the Army Field Manual's statement is correct. However the principles of the protocol appear to form a rule of customary international law applicable even to the United States.

Custom is the older and the original source of international law. International jurists speak of a custom when a clear and continuous habit of doing certain actions has grown up under the aegis of the conviction that these actions are, according to international law, obligatory and right.

To determine the existence of a customary rule of international law, state practice with respect to the use of poison gas and biological weapons in war should be examined. Where that practice indicates nonuse, the question must still be answered whether this was based on a belief that a rule of international law existed even for those not parties to the protocol. The recent practice and official views of the United States and Japan appear to be most relevant as they are the only major industrial states which have not ratified the protocol.

A. Practice and Belief of States on Gas and Germ Warfare

Since the Geneva Protocol of 1925

1. UNITED STATES

The United States did not engage in gas warfare during World War II although it could have been to our military advantage in the Pacific in 1945. At the beginning of United States participation in World War II, the State Department became concerned that the Japanese, not being parties to the Geneva Protocol, would engage in chemical warfare. The British, French, Italian, and German Governments had exchanged pledges to observe the

27 See note 26 supra.
28 Id.
30 F.J. BROWN, supra note 15, at 198.
protocol; the British had made the same offer to Japan, but it replied evasively.\(^{31}\) The State Department proposed that a declaration be made to Japan that the United States would comply with the protocol if others did. Secretary of War Stimson, however, opposed any acceptance of the protocol by declaration. In February of 1942 he urged that we "keep our mouths shut," apparently because he was concerned about our preparedness to retaliate if the Japanese used gas.\(^{32}\)

In June 1942, President Roosevelt was importuned by the Chinese to issue a statement concerning reported Japanese use of noxious gases in China.\(^{33}\) Without referring to the protocol, Roosevelt threatened "retaliation in kind and in full measure" if Japan persisted "in this inhumane form of warfare" against China or any other American ally.\(^{34}\)

A year later the United States was better prepared to retaliate, if necessary, and Roosevelt issued a more comprehensive statement. Again, however, he did not refer to the protocol:

From time to time since the present war began there have been reports that one or more of the Axis powers were seriously contemplating use of poisonous or noxious gases or other inhumane devices of warfare.

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.

As President of the United States and as Commander in Chief of the American armed forces, I want to make clear beyond all doubt to any of our enemies contemplating a resort to such desperate and barbarous methods that acts of this nature committed against any one of the United Nations will be regarded as having been committed against the United States itself and will be treated accordingly. We promise to any perpetrators of such crimes full and swift retaliation in kind. . . .\(^{35}\)

After Germany was defeated, consideration was given to using poisonous gas on Japanese forces in the Pacific in order to bring the war swiftly to an end.\(^{36}\) However, the joint chiefs never recommended its use to the President. Personal and institutional distaste for chemical warfare among military men probably played

\(^{31}\) Id.

\(^{32}\) Id. at 199.

\(^{33}\) Id. at 200.

\(^{34}\) Id. at 201.

\(^{35}\) 8 DEP'T STATE BULL. 507 (1943) (emphasis added).

\(^{36}\) F.J. BROWN, supra note 15, at 262, et seq.
a major role. The military view that gas was an insidious and dishonorable weapon did not necessarily mean that all military decisionmakers agreed with President Roosevelt that the use of gas had been “outlawed by the general opinion of civilized mankind.” But some did. President Roosevelt’s statement would, in any event, have been a hurdle to overcome even though his death left any final decision to President Truman.

The United States did not use gas warfare in Korea although authority to do so was requested by some of our commanders in the field. Our preparedness was greater than that of the North Koreans or mainland Chinese, and the gas might have been useful in flushing the enemy out of entrenched positions. When the North Koreans accused United States forces in Korea of germ warfare, American representatives denied the charges, maintaining that such warfare was abhorrent. Although not decisive, our failure to use gas in Korea and our defense against the germ warfare charge are evidence that we believed the use of poison gas and germ warfare to be wrong.

During the period between the Korean and Vietnam conflicts, Congressman Kastenmeier (D. Wis.) precipitated a debate on the use of chemical and biological warfare by introducing a draft concurrent resolution which would have reaffirmed the longstanding policy of the United States that in the event of war the United States shall under no circumstances resort to the use of biological weapons or the use of poisonous or obnoxious gases unless they are first used by our enemies. Congressman Kastenmeier deduced from public statements and articles that the Defense Department was attempting to relax policy strictures on chemical and biological warfare. When asked whether his administration was contemplating changing United States policy against initial use of chemical and biological weapons, President Eisenhower said that “no official suggestion has been made to me, and so far as my own instinct is concerned, it is not to start such a thing first.”

37 Id. at 282.
38 See id. at 284-85, 288; W. Leahy, I Was There 439-40 (1950).
39 See Kelly, supra note 7, at 14; J. Rothschild, Tomorrow’s Weapons 5 (1964).
40 See Kelly, supra note 7, at 14; J. Rothschild, supra note 39, at 5.
41 See B. Bechofer, Postwar Negotiations for Arms Control 196-201 (1961). The North Korean and Communist Chinese authorities refused to let a U.N. investigating commission enter their territories to determine the truth of their charges against the United States.
44 1960-61 Public Papers of the Presidents of the United States, Dwight D. Eisenhower 29.
administration later opposed the Kastenmeier resolution, however, and it was never brought to a vote.45

Assuming that our use of tear gases and herbicides in Vietnam does not violate the Geneva Protocol, we have observed its principles in that war. Moreover, in replying to Communist charges of violation, United States representatives excepted tear gases and herbicides from the provisions of the protocol, thereby implying a conviction that we had to observe those provisions.46 Similarly, Secretary Rusk insisted that we were not “embarking upon gas warfare in Vietnam.... We are not talking about gas that is prohibited by the Geneva Convention of 1925 or any other understandings about the use of gas.”47

In 1966, the United States sponsored and voted for a United Nations General Assembly resolution which called for “strict observance by all states of the principles and objectives of the Protocol” and condemned “all actions contrary to those objectives.”48 A United States delegate stated that “while the United States is not a party to the Protocol, we support the worthy objectives which it seeks to achieve.”49 Following this resolution, the State Department took the view that, by voting for the resolution, “the United States reaffirmed its long-standing support for the principles and objectives of the Protocol.”50 In this view, the “basic rule” set forth in the protocol “has been so widely accepted over a

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45 See Chemical-Biological-Radiological (CBR) Warfare and its Disarmament Aspects, A Study Prepared by the Subcommittee on Disarmament of the Senate Committee on Foreign Relations, 86th Cong., 2d Sess. 21 (1960) for reactions to the Kastenmeier proposal.

The Defense Department responded: “Similar declarations might apply with equal pertinence across the entire weapons spectrum, and no reason is perceived why biological and chemical weapons should be singled out for this special attention.” The State Department added: “As a member of the United Nations, the United States, as are all other members, is committed to refrain from the use, not only of biological and chemical weapons, but the use of force of any kind in a manner contrary to that organization’s charter.” Id. at 22.


47 52 Dep’t State Bull. 528 (1965).


During World War II the Japanese did use poison gas and replied evasively to a proposal that they observe the Geneva Protocol. In 1944, however, they used neutral diplomatic channels to communicate to the United States a denial of the use of gas “during the present conflict.” They further declared that they had “decided not to make use of it in the future on [the] supposition that troops of [the] United Nations also abstain from using it.” Japanese internal records state that this decision was based upon a recognition of a legal obligation not to use gas, upon Japan’s small stockpile as compared with that of the United States, and upon the vulnerability of Japanese islands to Allied retaliation. After the war, a Japanese court said, by way of dicta, that the use of poison gas and bacteria in war violated international law. Japan voted for the 1966 United Nations resolution calling for “strict observance by all states of the principles and objectives” of the Geneva Protocol. During the debate, the Japanese representative stated the belief of his delegation “that in any circumstances of war the use of chemical and bacteriological weapons should be most strictly avoided.”

Japan’s wartime actions up to 1944 revealed a conviction that it was not bound by any rule of international law prohibiting the use of poison gas. We have observed these principles consistently since 1925, although the United States . . . did not ratify the Geneva Protocol. We have consistently continued our de facto limitations on the use of chemical and biological weapons.

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Footnotes:

51 Letter of William B. Macomber, supra note 50. In a letter to Congressman Wolff (D. N.Y.), July 24, 1967, U.S. Ambassador to the U.N., Arthur J. Goldberg stated: The United States position on this matter [poison gas] is quite clear and corresponds to the stated policy of almost all other governments throughout the world as reflected in the voting (91 in favor and 4 abstentions) on U.N.G.A. Resolution 2162B of 1966 which condemned the use of poison gas in warfare. The use of poison gases is clearly contrary to international law . . . . (Emphasis added).

53 Id. at 249.
54 Id. at 260.
use of poison gas in war. Its conduct since then, although not free from ambiguity, tends toward recognition of a prohibition on such warfare applicable to Japan.

B. The Effect of Customary Limitations

The practices and convictions of states before the 1966 United Nations resolution have been described by other writers. There

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57 Professor William O’Brien of Georgetown University made a lengthy survey of state practices and convictions before the 1966 U.N. resolution. He believed the failure of any belligerent, even those not party to the protocol, to use chemical warfare during World War II, was remarkable. The conclusions of his survey are:

1. Customary international law and the Geneva Protocol to which most states adhere prohibit the first use of chemical weapons but permit retaliation in kind.
2. While there is no customary international law prohibiting biological warfare, its first use is denied to adherents of the Geneva Protocol.

Biological/Chemical Warfare and The International Law of War, 51 Geo. L.J. 1, 59 (1962) (emphasis added). A respected British authority reached a similar result; H. Lauterpacht concluded that the cumulative effect of “customary law and of the existing instruments having binding force... is probably to render such prohibition [on chemical warfare] legally effective upon practically all States.” 2 L. OPPENHEIM, INTERNATIONAL LAW 344 (7th ed. H. Lauterpacht ed. 1952). A French expert reached similar conclusions, see Meyrowitz, note 62 infra. Robert Tucker, Johns Hopkins School of Advanced International Studies and a consultant to the Naval War College, concluded that a customary rule existed against “poisonous or asphyxiating gases” but not against other gases or chemical agents. The Law of War and Neutrality at Sea, in 1955 INTERNATIONAL LAW STUDIES 52-53 & n.16 (U.S. Naval War College 1957).

Even before the 1966 U.N. resolution, some authorities believed custom prohibited both chemical and bacteriological warfare. Georg Schwarzenberger, Director of Studies at the London Institute of World Affairs, wrote in 1958:

The prohibition of chemical and bacteriological warfare contained in the Protocol must be taken to be merely declaratory of international customary law and equally binding on all states. It then becomes irrelevant whether any particular State is a party to the Geneva Protocol of 1925. The LEGALITY OF NUCLEAR WEAPONS 38 (1958). Morris Greenspan concluded that the Geneva Protocol, although by its terms binding only between contracting powers, is now so “universally recognized” that it “must be regarded as binding the community of nations independently of treaty obligation.” THE MODERN LAW OF LAND WARFARE 354 (1959).

Other authorities writing before the 1966 U.N. resolution doubted the existence of a broad customary rule prohibiting chemical or bacteriological warfare. Professor Joseph L. Kunz of University of Toledo Law School believed that chemical and bacteriological warfare could only be banned by agreement to which “at least all militarily important states are parties.” The New U.S. Army Field Manual on the Law of Land Warfare, 51 AM. J. INT’L L. 388, 396 (1957). Professor Myres McDougal of Yale concluded that “it remains controversial whether a general prescription has emerged that is operative not only as against the... nations which have ratified the Protocol but also as against those which have not, such as the United States.” M. MCDouGAL & F. FELICIANO, LAW AND MINIMUM WORLD PUBLIC ORDER 637 (1961). Julius Stone, Challis Professor of International Law and Jurisprudence, University of Sidney, concluded in 1954 that whether

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is no general agreement among these commentators on a rule of customary international law applicable to those not party to the Geneva Protocol. One major stumbling block for some scholars was that the United States, the strongest military power, had not ratified the protocol. 58 Nor had we, before 1966, issued any general declaration indicating an intent to observe its principles. Even the Roosevelt statement of 1943 failed to refer to the protocol. 59

In 1966, however, we sponsored and voted for language in a United Nations resolution calling for “strict observance by all States of the principles and objectives of the Protocol” and condemning “all actions contrary to those objectives.” 60 Ninety other countries voted for this resolution. 61 Having, in effect, agreed to observe the principles of the protocol, the United States, Japan, and other nonparties which supported the resolution supplied toxic gases were then prohibited in war by international law was debatable. In the case of bacteriological warfare, he said that the only prohibition was upon parties to the Geneva Protocol.

Since, moreover, the United States is not a party to the Geneva Gas Protocol, and it is unlikely that that State will be neutral in any major war, it is apparent that whether the prohibition on bacteriological warfare operates in such a war will depend upon the willingness of that State to accept voluntarily the self-denying ordinance of the Protocol.

LEGAL CONTROLS ON INTERNATIONAL CONFLICT 556-57 (1954) (emphasis added).

Three U.S. Army officers surveyed the practices and convictions of states on chemical or bacteriological warfare shortly before the 1966 U.N. resolution: Colonel Bernard Brungs, Major Joseph Kelly, and Major William Neinast. None concluded that there was a customary international rule broadly prohibiting the first use of chemical or biological weapons in war. Kelly, however, concluded that customary law prohibited the United States from using poison gas directly against noncombatants or in situations where the pain and suffering caused by such agents would be disproportionate to the military gain. Gas Warfare in International Law, supra note 7, at 64. Brungs found a customary international law rule prohibiting the first use in war of toxins—poisonous products of microorganisms. The Status of Biological Warfare in International Law, 24 MILITARY L. REV. 47, 90 (1964). Neinast found no customary rule whatever in the biological area. The Status of Biological warfare in International Law, 24 MILITARY L. REV. 1, 43 (1964).

58 See Kunz, McDougal, and Stone, supra note 57.
59 See note 35 supra and accompanying text.
60 G.A. RES. 2162(B), supra note 48.
61 See 1966 DOCUMENTS ON DISARMAMENT 798 n.1. Albania, Cuba, France, and Gabon abstained. Of these, only France is a party to the protocol. The French representative stated that a “condemnation of chemical weapons in general” could not be “predicated upon the text of the Geneva Protocol.” He added that it was difficult to demand “that states which have not signed and ratified a treaty or convention comply with its principles or norms.” In his belief, the proposal of the U.S. and others that the resolution call for observance of the “principles and objectives” of the protocol did not eliminate all objections and might “alter the letter, and certainly, the spirit of the Protocol.” 21 U.N. GAOR, 1st Comm., P.V. 201, at 204 (1966).
significant evidence of the existence of a customary rule. Added
to the other evidence about which the commentators have argued,
these actions strongly indicate a customary rule banning the first
use of poison gas and germ weapons in accordance with the prin-
ciples of the protocol.\textsuperscript{62}

This may be an unexpected conclusion for many. To say that
the United States must observe the principles of a treaty which
was never ratified by the Senate is unusual. There are, however,
a few precedents in United States practice.\textsuperscript{63} In addition German
defendants in the Nuremburg trials were convicted of violating
treaty standards under circumstances in which Germany had no
treaty obligation.\textsuperscript{64} The evidence of a customary rule in the case

\textsuperscript{62} It would be difficult to consider this document [the resolution] as
meaning less than it says. What it says is the affirmation of the
validity of the precept enunciated in the Geneva Protocol as an
obligation having force of law over all countries—the prohibition of
the use of chemical and/or biological instruments of warfare. We
are forced to conclude that the rule of international customary law
prohibiting CW [chemical warfare], a rule which existed already
aside from the Protocol, must now be considered as extending to BW
[bacteriological warfare].

From an unpublished paper prepared for the Swedish Institute of Peace
Research and Conflict Resolution by the French authority Henri Meyro-
witz, Biological Weapons and International Law, Prohibition of the Use
of Biological Weapons and Proposals for Banning the Production of Such
Weapons (April 1967).

\textsuperscript{63} There is no doubt that, when all or most of the Great Powers have
deliberately agreed to certain rules of general applicability, the rules
approved by them have very great weight in practice among States
which have never consented to them. \ldots A striking proof of this
tendency was given in the war of 1898 between Spain and the
United States. Neither belligerent was a party to the article of the
Declaration of Paris of 1856 against privateering; the United States
had in fact refused to join in it. \ldots Nevertheless, when the war of
1898 broke out, the United States proclaimed its intention of adhering
to the Declaration of Paris, and the rules laid down were in fact
observed by both belligerents. \ldots

\textsuperscript{64} See United States v. Goering, in \textit{OPINION AND JUDGMENT OF THE
INTERNATIONAL MILITARY TRIBUNAL 48-49, 82-83} (1947). A Soviet military
tribunal sitting in Khabarovsk in December 1949 convicted a number of
Japanese for engaging in bacteriological warfare against the Mongolian
of the Geneva Protocol is at least as strong as that relied upon at Nuremberg.

III. Reservations to the Geneva Protocol

France, the first nation to ratify the protocol, affixed a statement to her ratification, the first paragraph of which reads: "The said Protocol is only binding on the Government of the French Republic as regards States which have signed or ratified it or which may accede to it." This statement appears to have been made out of an abundance of caution because the protocol itself said that parties "agree to be bound as between themselves." Since this "reservation" does not change the treaty's legal effect, it probably does not constitute a true reservation to the protocol requiring acceptance by other parties. In any event, the records disclose no formal objection to it.

A number of later adherents to the treaty followed the French example. However, since the principles of the protocol appear now to have become a rule of general application by custom, the French first paragraph and others like it are probably no longer mean-

People's Republic in 1939 and against the Chinese in 1940-1942. 2 L. Oppenheim, supra note 57, at 343 n.2. A British military manual notes that inasmuch as "Japan was not a party to the Protocol, the Russian Military Tribunal at Khabarovsky . . . would therefore seemed to have assumed that the prohibition of bacteriological warfare derived from the customary law of war prevailing among civilized nations . . . ." Quoted in O'Brien, supra note 57, at 34 n.90.

Part of the indictment brought against Japan by the Tokyo War Crimes Tribunal was "[e]mploying poison contrary to the international Declaration respecting Asphyxiating Gases, signed by (inter alia) Japan and China at the Hague on the 29th of July 1899 . . . and Article 171 of the Treaty of Versailles. In the wars of Japan against the Republic of China, poison gas was used . . . ." Japan was a party to the Treaty of Versailles but article 171 was directed at Germany. See note 11 supra and accompanying text. The judgment does not deal with this charge. See O'Brien, supra note 57, at 34 n.90.

65 The list of parties to the Protocol together with their dates of adherence appears at note 25 supra. The texts of the reservations, as they appear in the files of the Department of State, appear in the Appendix following the article.

66 The relevant language of the protocol is quoted in the text at note 17 supra. The French reservation, however, implies that France intended to be bound "as regards States which have signed or ratified" the protocol. In this respect the reservation appears to go beyond the actual obligation of the protocol. France, as the first of the signatories to ratify, probably intended this only as a gesture toward those signatories which had not yet ratified but were expected soon to do so.

67 A reservation is a formal declaration made by a signatory before it becomes bound by an international agreement that the agreement will not be binding upon it except upon terms that it regards as changing the effect of the agreement under international law.

Restatement (Second) of the Foreign Relations Law of the United States § 124 (1965). See also id. comment c and illustrations 2 and 3.
Thus, if all states must observe the principles of the protocol, France would appear to be obligated not to initiate the use of poison gas or germ warfare against any state even though the reservation said France was bound only to parties.\(^6^8\)

The French statement has a second paragraph which reads: "The said Protocol shall ipso facto cease to be binding on the Government of the French Republic in regard to any enemy State whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol."\(^7^0\) The main purpose of this paragraph was probably to make clear that France would be free to retaliate against an enemy who violated the protocol to the injury of France. As far as this purpose is concerned, the statement may not be a true reservation since it reflects a general rule of treaty interpretation: material breach by one of the parties to a multilateral treaty permits an aggrieved party to suspend performance of its obligations toward the violator.\(^7^1\)

Paragraph two is, however, broader than this rule. It would suspend the obligations of the protocol for France when an ally of an enemy of France, whether or not the ally was a party, failed to observe the protocol, even though France was not itself aggrieved. For example, if before the fall of France in World War II, Japan (a nonparty) had used gas against China, France would have been free to use gas against Hitler, Japan’s ally.\(^7^2\) Without the reservation, France would still have had an obligation not to use gas on Germany.

The necessary conclusion is that paragraph two is broader than the interpretation which would have been given to the protocol without the reservation. It is in this respect a true reservation. The question arises whether other parties have accepted it as a limitation on the obligations of France under the protocol. Since the French were the first to ratify, all later parties had notice of their reservation and are bound by it because they did not object when they became parties.\(^7^3\) The Soviet Union and several of its

\(^{68}\) See notes 29-64 supra and accompanying text. In the Nuremberg trials, the court held that custom had rendered ineffective an article from the Hague Convention of 1907 which was somewhat similar to the French paragraph 1 reservation. The court said that "by 1939 these rules laid down in the convention were recognized by all civilized nations . . . ." United States v. Goering, supra note 64, at 83.

\(^{69}\) "To the extent to which the Protocol should be considered as stating or constituting a rule of customary law . . . the first of the two clauses [i.e., French first paragraph] has lost its significance." Meyrowitz, supra note 62, at 5.

\(^{70}\) See Appendix.

\(^{71}\) RESTATEMENT, supra note 67, at § 158; see Opinion of the Legal Adviser of the Department of State, in Hearings on Executive M before the Senate Foreign Relations Comm. 88th Cong., 1st Sess. 37-40 (1963).

\(^{72}\) Meyrowitz, Les Armes Psychochimiques et le Droit International, 10 Annuaire Francais de Droit International 81, 100 n.51 (1964).

\(^{73}\) RESTATEMENT, supra note 67, at § 128, comments d and f.
East European allies, Great Britain and several of the members of the Commonwealth, Belgium, and the Netherlands, ratified the protocol after France did with reservations like the French paragraph two. But are states which adhered to the protocol before one of these later reservations was entered bound by it? For example, is Italy, which ratified without reservation after France but before the Soviet Union, bound by the Soviet paragraph two?

In the presence of objection to a reservation, the traditional rule is that there are no treaty relations between the reserving party and a party which objects because the reservation amounts to a "counter offer" which has not been accepted. As already indicated, Italy is bound by the French reservation because she had notice of it before becoming a party. However, she did not receive notice of the Soviet reservation until after she had adhered to the treaty and is not bound by it unless her silence can be construed as acquiescence. Since she did not object to the French paragraph two before becoming a party, she would appear to have had little reason to object to the similar Soviet paragraph two. Common sense and modern practice say she is bound by the Soviet reservation.

74 See Appendix for the language of all the reservations. There are variations in these reservations but none appears to be significantly broader than the French reservation. The Soviet reservation, for example, states that the protocol shall cease to be binding on the U.S.S.R. in regard to all enemy states "whose armed forces or those Allies de jure or in fact do not respect" the protocol. The phrase "de jure or in fact" does not appear in the French reservation. However, the phrase apparently means "Allies de jure or in fact" rather than "de jure in fact do not respect." A translation from the Russian by experts on Soviet treaty practices confirms this view. See J. TRISKA & R. SLUSER, THE THEORY, LAW AND POLICY OF SOVIET TREATIES 82 (1962) ("the formal or factual allies of which"). If this translation correctly reflects the Soviet intention, its scope does not appear broader than the French reservation.

The Dutch reservation applies only to chemical warfare but is otherwise like the French reservation. There are other minor variations, but none seem to be of great significance.

75 RESTATEMENT, supra note 67 at § 128, comment f, illustration 2. In the case of treaties (such as the protocol) which are intended to have the widest possible application for humanitarian reasons, the International Court of Justice has said that this traditional rule should be modified somewhat. If the reservation, although the subject of an objection, is "compatible with the purpose and object" of the treaty, the reserving party may be regarded as a party despite the objection. Reservations to Genocide Convention, [1951] I.C.J. 29-30.

76 See RESTATEMENT, supra note 67, at § 128, comment d.

77 Id. at § 128, comments d and h; Reservations to Genocide Convention, [1951] I.C.J. 24-26; International Law Comm'n, Report, 21 U.N. GAOR, Supp. 9, art. 17(5) (1966) ("a reservation is considered to have been accepted by a State if it shall have raised no objection to the reservation by the end of a period of twelve months after it was notified of the reservation or by the date on which it expressed its consent to be bound by the treaty, whichever is later.") But see 5 G. HACKWORTH, DIGEST OF INTERNATIONAL LAW § 482 (1943); A. McNAIR, THE LAW OF TREATIES 159 (1961).
Since no objections have been found to any reservations, all adherents to the protocol appear to have treaty relations with all other adherents. Moreover, the differences in obligations between those with reservations and those without appear to be relatively unimportant. As already stated, reservations of the paragraph one variety are no longer meaningful since the principles of the protocol appear to have become applicable to all states through custom. Paragraph two reservations, on the other hand, are probably as important now as they were when drafted because of the alliance arrangements formed during and after World War II. The position of the United States with respect to chemical warfare during this war was clearly influenced by the alliance of the Axis Powers against the Allies. President Roosevelt's famous 1943 declaration said that the use of poison gas by "any of our enemies . . . against any one of the United Nations [the Allies] will be regarded as having been committed against the United States itself and will be treated accordingly. We promise any perpetrators of such crimes full and swift retaliation in kind . . . ."78 If the protocol had been binding on the United States subject to such a reservation, its obligations would have been suspended "in regard to any enemy State whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol." President Roosevelt promised retribution against the "perpetrator," the state using gas. Paragraph two is not by its terms so limited. More importantly, perhaps, President Roosevelt did not condition United States retaliation upon injury to the United States itself. Neither would paragraph two.

The alliances formed since the war seem quite consistent with the policy behind paragraph two. Article five of the North Atlantic Treaty provides that an armed attack against one or more of the allies in Europe or North America "shall be considered an attack against them all . . . ."79 Somewhat similar provisions appear in our agreements with our Latin American and Asian allies.80 The Soviet Union has made comparable promises to its East European allies in the Warsaw Pact.81 These pro-

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78 See text at note 35 supra (emphasis added).
visions anticipate that major war, if it comes, will be fought by military alliances, and that all those within an alliance will cooperate to repulse an attack. States on one side are likely to regard all allies on the other side as enemies—at least those which participate in or support an attack. Once poison gas or germs are used in a war of alliances, both the victim and its allies will be under pressure to retaliate or threaten retaliation in kind, not only against the wrongdoer but also against the wrongdoer’s important allies. For example, if East Germany attacked West Germany with gas, the United States might be expected by its allies to retaliate against the Soviet Union unless that country took immediate steps to prevent a recurrence of the attack. President Kennedy’s threat of retaliation upon the discovery of Soviet missiles in Cuba is illustrative. He declared:

It shall be the policy of this nation to regard any nuclear missile launched from Cuba against any nation in the Western Hemisphere as an attack by the Soviet Union on the United States, requiring a full retaliatory response upon the Soviet Union. Most protocol parties having paragraph two reservations are now members of alliances with military responsibilities. In any future European war involving chemical or biological agents, the allies on one side are likely to regard the use of such weapons by an ally on the other as suspending their protocol obligations toward all members of the other side. Under these circumstances, paragraph two reservations would probably be regarded as being in effect for each of the allies on both sides even though some NATO allies and some Warsaw Pact members had not in fact entered such a reservation. This result would equalize the duties of states under the protocol, thereby producing that mutuality of obligation which states customarily desire. Thus, Italy, which did

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82 The rules of war limiting the right of reprisal contemplate that certain preliminary steps will be taken before retaliation even if the obligations of the protocol are suspended by the terms of paragraph two. O’Brien lists the following rules on reprisals which he believes should be applicable in the event of use of poison gas or germs in war:

1. There must be an antecedent international delinquency by an enemy.
2. The victim of the delinquency, having made a conclusive determination that the violation has occurred, must use all lawful means at his disposal to induce the delinquent to desist from his illegal behavior.
3. If there appears to be no reasonable hope for cessation of the illegal behavior of the enemy, the injured belligerent may retaliate with means that would normally be denied it by the law.
4. The reprisal should be proportionate to the illegal act or acts which engendered the right of reprisal. O’Brien, supra note 57, at 45. See also The Law of Land Warfare, supra note 1, ¶ 497, at 177-78.

83 47 DEPT STATE BULL. 718 (1962).
not object to a Soviet paragraph two but did not enter such a reservation herself, would be on the same footing with regard to the protocol as the Soviet Union. Finally, a significant result of paragraph two is to influence allies toward a common policy of observing the protocol for, if one does not, the others may be subject to retaliation. For all these reasons, the leeway given by paragraph two will probably be regarded as acceptable at least in cases where any of the allies on either side of a future conflict have entered paragraph two reservations. Thus, in any war involving existing alliances, the obligations of all those participating will likely be limited by paragraph two. Differences in the obligations involved in different treaty relationships resulting from the nonuniversality of paragraph two do not therefore seem too important to the United States under all the circumstances.

IV. INTERPRETATION OF THE PROTOCOL IN LIGHT OF UNITED STATES PRACTICES IN VIETNAM

A. Tear Gases

The United States, South Vietnam, and Australia have used tear gases in the war in Vietnam. The North Vietnamese and Viet Cong have used such gases also, but were not the first to do so. Whether the Geneva Protocol prohibits the use of tear gases in war is an unsettled question. The United States' view is that the protocol was framed to meet the horrors of poison gas warfare in the First World War and was intended to reduce suffering.

84 In the view of the International Law Commission, a reservation which is accepted by silence by a state already a party to the treaty not only modifies the relevant treaty provisions to the extent of the reservation for the reserving party, but "[m]odifies those provisions to the same extent for such other party in its relations with the reserving State." International Law Comm'n, Report, supra note 77, art. 19(1)(b).

85 The second clause ... takes on a deterrent character which is far from negligible in a war involving a coalition. In fact, its effect is to create between belligerents who are members of a coalition, whether or not they signed the Protocol, a common position in regard to the prohibitions laid down on the document. If belligerents who are obligated, but also protected, by the Protocol learn that this protection is jeopardized by a possible course of action on the part of an ally who is not very vulnerable to reprisals himself, it is natural that their destiny and their desire should weigh heavily against a decision of that ally to use weapons prohibited by the Protocol.

Meyrowitz, supra note 62, at 5.

86 Cf. Meyrowitz, supra note 72, at 100. Meyrowitz here expresses concern about the lack of clarity resulting from the different "regimes" of treaty relationships, the differences depending on whether paragraph two reservations have been entered or not. The reconciliation attempted in the text would help remove the lack of clarity as well as equalize obligations.

87 S. Hersh, CHEMICAL AND BIOLOGICAL WARFARE 167-86 (1968).

88 F.J. Brown, supra note 15, at 309.
by prohibiting the use of poisonous gases such as mustard gas and phosgene. It does not apply to all gases. It would be unreasonable to contend that any rule of international law prohibits the use in combat against an enemy, for humanitarian purposes, of agents that Governments around the world commonly use to control riots by their own people. 89

The Soviet Union and its allies take the position that the use of tear gases in war is prohibited by the Geneva Protocol. 90 The issue has been in contention for a long time, and no consensus exists on its resolution.

The Geneva Protocol prohibits “the use in war of asphyxiating, poisonous or other gases . . . .” “Other” must include gases not properly described as “asphyxiating” or “poisonous.” It certainly includes mustard gas which was not regarded as “asphyxiating” or “poisonous” by experts at the time the protocol was negotiated. 91 Whether it also includes tear gases—which are neither “asphyxiating” nor “poisonous”—is unclear.

89 U.N.G.A. Statement of U.S. Representative Nabrit, supra note 26, at 800.
91 Mustard gas was designed by Germany to bypass the gas masks used effectively by the Allies. It attacked a man’s whole body, creating large but relatively painless blisters on his skin. While it produced eight times as many Allied casualties as all other gases utilized, it caused few deaths. Kelly, supra note 7, at 10.

In response to a League of Nations request, experts from a number of countries provided information from which a report on the effects of chemical and bacteriological weapons was compiled in 1924. The experts divided the then known chemical “noxious substances” used in war into three classes apparently corresponding to “poisonous,” “asphyxiating,” and “all other.” These classes were:

Toxic agents which affect the nervous system (e.g., derivatives of prussic acid).
Suffocating or asphyxiating agents which cause fatal damage to the lungs (e.g., chlorine and phosgene) or which directly affect the blood (e.g., carbon monoxide).
Irritant (lachrymatory [tear producing], sneeze-producing and blistering) agents.

The report based on the experts’ advice goes on:

Effects of Irritant Agents
These bodies possess the property of putting a man out of action without killing him.

(a) Lachrymatory Agents deprive a man of one of his essential senses—sight. They produce intolerable pain in the neighborhood of the external organs of sight and render a man practically blind as long as he remains in the gas-impregnated atmosphere. But, contrary to public popular opinion, says Professor Zanetti [of Columbia University], the blinding effects of these gases is purely temporary, being caused only by irritation of the membrane of the eyelids and not by any deep-seated effect on the eyeball or optic nerve. The effect usually passes in a few hours, or a few days at the most, and although the victim is as completely put out of action as if his eyes
The principle of *ejusdem generis* suggests that the word "other" should draw some meaning from "asphyxiating" or "poisonous" and that, therefore, the "other gases" prohibited must be similarly deleterious to man.\(^{62}\) This is consistent with the apparent meaning of the French text of the protocol which is equally authentic.\(^{93}\) That text proscribes the use in war of "gas asphyxiants, toxiques or similaires." "Similaires" or "similar gases" presumably include those which are not asphyxiating or poisonous but which have similar effect.\(^{94}\) But whether "other" and "similaires" include only

were gouged out, there is no record of permanently serious effect being produced thereby.

The efficacy of lachrymatory gas, coupled with its property of not causing permanent disablement, has led to its adoption by police organizations. By its means criminals may be captured without loss of life.

(b) *Sneeze-producing Agents* are arselenical compounds . . . : they cause constant and uncontrolled sneezing attacks of suffocation and intolerable headaches. They drive men to get rid of their protecting masks, thus exposing them to toxic products which may be fired concurrently or immediately after the sneeze-producing gas.

(c) *Blistering Agents.* Certain products such as dichlorethyl sulphide, also called "mustard gas" or "yperite," cause lesions to the skin and mucous membranes which may be of a very serious character. Whenever the skin is exposed even to the vapour exhaled from the slow evaporation of yperite, blisters appear within two to eight hours . . . . In short . . . . this action is . . . . capable of producing most serious effects on the health of the men who have been subject to it.

Moreover—and this is the principal effect—soil which is saturated with yperite contaminates by contact persons who pass over or are posted on it. The yperite penetrates the fabric of clothing and turns it into an actual blistering plaster. . . . The ground and any articles which have been impregnated with the gas remain dangerous for a number of days.

In discussing the combined effects of irritants, suffocating or asphyxiating, and toxic agents, Professor Mayer of France said:

All the lachrymatory and suffocating gases are fatal if taken in large quantities. If the blistering substances, instead of affecting the skin penetrate the lungs, they produce fatal lesions. Thus the effect to which we refer when we speak of a lachrymatory or blistering substance is only the predominant effect. . . . It would, therefore, be a mistake to classify chemical compounds according to the gravity of the symptoms to which they give rise. (Emphasis added).

Professor Zanetti remarked that "the dropping of a few aeroplane bombs filled with a high-power lachrymatory gas would as effectively shut down a factory, say, a steel mill, for as long as a month without causing any considerable destruction of life or property such as would ensue by long-range shelling or bombing with high explosive.


\(^{62}\) Cf. McBoyle v. United States, 283 U.S. 25 (1931) (phrase "any other self-propelled vehicle not designed for running on rails" does *not* include *aircraft* because it is preceded by "automobile, automobile truck, automobile wagon, motor cycle" all of which are *land vehicles*).

\(^{93}\) See note 17 *supra* and accompanying text.

\(^{94}\) See Meyrowitz, *supra* note 72, at 94. Meyrowitz interprets "toxiques" in the French text to include gases which do no more than injure health. In his view, "similaires" therefore must encompass gases, such as tear gases, which do something less. However, this definition of "toxiques"
gases causing death or serious injury, or whether they include tear gas also, is still not clear.

Some commentators have argued that the English text’s use of “other” included tear gases even though the French text used “similaires.”95 Others have reached the contrary view.96 None has presented a detailed analysis of the negotiating history to buttress his case.

The pertinent language of the protocol is derived from the Washington Treaty on Submarines and Noxious Gas of 1922, which was in turn derived from the Treaty of Versailles of 1919. The history of each, the Geneva Protocol, the Washington Treaty, and the Versailles Treaty, must therefore be examined.

1. THE TREATY OF VERSAILLES

The French were using tear gases for domestic police purposes as early as 1912.97 Tear gas was used in World War I to a limited extent by both the French and the Germans. After the war the fear of the kinds of gases the Germans had used for major attacks (e.g., chlorine, phosgene, and mustard gas) produced the widespread international concern about all chemical warfare.98

During consideration of provisions limiting German rearmament in the Treaty of Versailles, a commission of military experts suggested a provision which read: “Production or use of asphyxiating, poisonous or similar gases. . . are forbidden.”99 This draft was approved in principle by the heads of government and foreign ministers and turned over to a drafting committee.100 That committee produced a draft which read: “The use of asphyxiating, poisonous or similar gases . . . being prohibited, their manufacture and importation are strictly forbidden in Germany.”101 The French text contained the same word, “similaires” for “other,” as does the Geneva Protocol.

The drafting committee’s text shows recognition that there were
existing prohibitions ("being prohibited") against the use of poison gases in war, but none against their "manufacture or importation" in Germany. There is no record that the draftsmen discussed tear gas or regarded their change of "similar" to "other" as significant. The drafting committee's text was accepted by Wilson, Lloyd George, Clemenceau, and other leaders without any indication that they were aware that the committee had in any way changed the meaning of the text they had approved earlier. Later, just before the text was submitted to the Germans, it was presented to a preliminary conference by a French rapporteur who, in analyzing the provisions of the treaty, said that "poison gas" was what was to be denied to the Germans.102

The records of the conference do not disclose what earlier prohibitions the draftsmen relied upon when they produced a draft saying "asphyxiating, poisonous or other gases . . . being prohibited . . . ." They may have been referring to the Hague Gas Declaration of 1899 which prohibited "the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases."103 However, both the British and the French believed that this language did not include tear gas.104 The Versailles "being prohibited" language most likely referred to the 1907 Hague Convention rules against "poison or poisoned weapons," against killing or wounding "treacherously," and against employing war material calculated to cause "unnecessary suffering."105 These rules prob-

102 Id. at 377.
103 See text at note 2 supra.
104 For the French view, see text at note 6 supra. In 1913, the British considered that a "lachrymatory [tear causing] substance without asphyxiating or deleterious effect" was permitted by the wording of the declaration, "although contrary to its spirit." F.J. Brown, supra note 15, at 7-8.

Some German writers have concluded that the declaration prohibited tear gas. This would support the German contention that chlorine was used at Ypres in retaliation to French first use of tear gas. See, e.g., id. at 6-7 n.6; E. Castren, supra note 5, at 195; Bernstein, supra note 6, at 905-06. (Such a French first use may have occurred but it finds no proof in available archives of the governments concerned. See F.J. Brown, supra note 15, at 6 n.6; Kelly, supra note 7, at 8 n.28.) Other German writers reach the opposite conclusion. Their views are described in Meyerowitz, supra note 72, at 92 n.31.

An American technical expert says there are grounds for supposing that by a strict technical interpretation, the French use of tear gas grenades violated the 1899 Declaration. "This opinion, however, proceeds from toxicological knowledge not available at the outset of World War I. No government can be criticized for using against an invading enemy, weapons employed against its own unruly nationals." A.M. Prentiss, supra note 97, at 688. Other writers conclude that the 1899 Declaration did not prohibit tear gas. See, e.g., E. Castren, supra note 5, at 193; T.J. Lawrence, The Principles of International Law 531 (Winfield ed. 1923).

105 Regulations Respecting the Law and Customs of War on Land, Hague Convention No. IV, Oct. 18, 1907, art. 23 (a),(b),(e) (1907), reprinted in 2 Treaties, Conventions, International Acts, Protocols and Agree-
ably apply to gases that inflict suffering disproportionate to their military value and, perhaps, to gases which can be assimilated with traditional poisons because they are deadly, painful, and treacherous.\textsuperscript{106} However, no authority has been found for the proposition that they prohibit the use of tear gases in war.\textsuperscript{107} Quite likely no prohibition on such use was recognized as in "being" in 1919 when the language of the Treaty of Versailles was drafted. Therefore, that treaty probably did not prohibit tear gases to Germany.

2. THE 1922 WASHINGTON TREATY

This treaty also prohibits the use in war of "asphyxiating, poisonous or other gases." Its French text contains the same word "similaires" for "other."\textsuperscript{108} The negotiating history indicates that the Versailles language was offered by the American delegation because many countries had already agreed to it. The language appears to have represented a compromise between conflicting points of view. The technical experts of the negotiating countries were unable to agree on any general prohibition on chemical warfare. The United States experts contended, with their French and British colleagues, that poison gas was similar as a weapon to shrapnel, machine guns, and bombs.\textsuperscript{109} The Italians and Japanese disagreed.\textsuperscript{110} Finally, the experts concluded that the only limitation "practicable" was to "prohibit the use of gases against cities and other bodies of noncombatants . . . ."\textsuperscript{111} This result was not accepted by the Advisory Committee to the United States delegation even though the American expert had agreed to it. "Whatever may be the arguments of the technical experts," said the Advisory Committee, the "conscience" of the American people insists "upon the total abolition of chemical warfare, whether in the Army or Navy, whether against combatant or noncombatant."

\textsuperscript{106} See, e.g., E. Castren, supra note 5, at 194.

\textsuperscript{107} Lawrence concludes that tear gases did not violate the Hague Regulations. T.J. Lawrence, supra note 104, at 531. Castren points out that the prohibition on poison and poisoned weapons did not even "extend to asphyxiating gases." E. Castren, supra note 5, at 194. See also NAVAL WAR COLLEGE, 1936 INTERNATIONAL LAW SITUATIONS 102 (1936).

\textsuperscript{108} For the language of the treaty, see text at note 13 supra.

\textsuperscript{109} See CONFERENCE ON THE LIMITATION OF ARMAMENT 730 (Washington, 1921-1922); Conference on the Limitation of Armament, S. Doc. No. 126, 67th Cong., 2d Sess. 384-88 (1922). The chairman of the experts committee was the president of the American Chemical Society and the American expert was the head of the Army's Chemical Warfare Service.

\textsuperscript{110} Conference on the Limitation of Armament, supra note 109, at 730.

\textsuperscript{111} Id.

\textsuperscript{112} Id. at 732.
The Advisory Committee clearly wished to prohibit the use of tear gases in war, saying that "there can be no actual restraint of the use by combatants of this new agency of warfare, if it is permitted in any guise."\textsuperscript{113} Agreeing with this view was a report of the Navy General Board which specifically referred to "tear gases." The board said that "there will be great difficulty in a clear and definite demarcation between the lethal gases and those which produce unnecessary suffering as distinguished from those gases which simply disable temporarily."\textsuperscript{114} The American Advisory Committee recommended that the conference bar all of these kinds of gases. It proposed a resolution to be adopted by the conference recommending that "[c]hemical warfare, including uses of gases, whether toxic or nontoxic, should be prohibited by international agreement . . . ."\textsuperscript{115}

Secretary of State Hughes did not put this resolution to the conference. Nor did he base his proposal on the views of the technical experts. While he quoted from both reports in his statement to the conference, the resolution offered by the United States delegation and accepted by the conference was based on the language of the Treaty of Versailles.

Hughes did not refer to tear gases. He said that, "in light of the advice of the American Advisory Committee" and "the specific recommendation of the General Board of the Navy," the American delegation "felt that it should present the recommendation that the use of asphyxiating or poison gas be absolutely prohibited."\textsuperscript{116} Senator Elihu Root, who submitted the text to the conference, said it was drafted in the language of the Treaty of Versailles and other peace treaties because "between thirty and forty powers" had already agreed to that language, "so that there was not much further to go in securing . . . general consent . . . ."\textsuperscript{117} Root understood the Versailles Treaty's "declaration against the use of poison gases to be a statement of the previous rules which had been adopted during the course of the Hague Conferences."\textsuperscript{118} As we have seen, these probably were never intended to apply to tear gases.

\textsuperscript{113} Id.
\textsuperscript{114} Id. at 734-36.
\textsuperscript{115} Id. at 732.
\textsuperscript{116} Id. at 736.
\textsuperscript{117} Id. at 738.
\textsuperscript{118} Id. The memoranda prepared for the American Delegation before the conference summarized earlier League of Nations considerations of this subject. These reported that the League's Council had decided to "condemn the use of poison gas" based upon a report submitted by the French president of a League armaments commission. He said he thought it "impossible in this matter for the Council to go further than the Hague Conference and the Treaty of Versailles, which . . . includes provisions forbidding the use of asphyxiating gas." (Emphasis added.) His reference to the Hague Conference was to the 1907 regulations concerning the
3. THE GENEVA PROTOCOL OF 1925

In 1924, a committee of experts under the auspices of the League of Nations considered the effects of chemical and bacteriological warfare. The evil of greatest concern of these experts, and to participants at the later conference, appeared to be the use of poison and mustard gases against large cities. The experts also discussed tear gases, calling them “lachrymatory” agents:

The efficacy of lachrymatory gas, coupled with its property of not causing permanent disablement, has led to its adoption by police organizations. By its means criminals may be apprehended without loss of life.

laws and customs of land warfare, including “Article 23 [in which] certain prohibitions have been laid down in particular on the employment of poison and poisoned weapons.” Memoranda for the Members of the American Delegation to the Conference on Limitation of Armaments (Including the Private Manufacture of Arms), the Economic Weapon of Article 16, and the Control of Traffic in Arms, at the Paris Peace Conference and Under the League of Nations 8, 10, 98-99 (GPO 1921). Neither the Treaty of Versailles nor the Hague regulations are thought to prohibit tear gas. See notes 97-107 supra and accompanying text.

During Senate consideration of the Washington Treaty of 1922, the one Senator who criticized the treaty said, among other things, that the phrase “other gases” was “all inclusive.” 62 CONG. REC. 4729 (1922) (remarks of Senator Wadsworth, Chairman of the Senate's Military Affairs Committee). He added that the French text used the word “similaires” but that “other gases” in the English text seemed to have a different meaning. However, he concluded, this was “a point of comparatively small importance.” The debate contains no other reference to the point, and no reference at all to tear gases.

The gas to be employed would not necessarily be one which only disables human beings for a time, since the object would be to hamper or destroy some continuous activity aimed at by the attack. Mustard gas, for instance, dropped in large quantities would be likely to hang about the cities and slowly penetrate the houses. ... [H]eavy poison gases linger, even in the open country, for quite a long time. In a city it is difficult to say how long they might remain, and during all that time the danger would continue.

It may well be that an unscrupulous belligerent may not see much difference between the use of poison gas against troops in the field and its use against the centres from which those troops draw the sinews of war.

A similar concern was expressed by the American Advisory Committee to the 1922 Washington Conference. They stated:

The frightful consequences of the use of toxic gases, if dropped from airplanes on cities, stagger the imagination. ... If lethal gases were used in such bombs [high explosive bombs as those used to attack cities in the First World War], it might well be that such permanent and serious damage would be done, not only of a material character but in the depopulation of large sections of the country, as to threaten, if not destroy, all that has been gained during the painful centuries of the past.
The 1925 Geneva conference adopted as the scope of the protocol's prohibition the Versailles phrase "asphyxiating, poisonous or other gases" proposed by the United States. In making this proposal, Congressman Burton, the American representative, expressed a strong desire for a provision "relating to the use of asphyxiating, poisonous and deleterious gases." The report of the legal committee characterized the American proposal as one dealing with "asphyxiating, poisonous or other similar gases." Another committee described the class as "asphyxiating, poisonous and other deleterious gases." There is no recorded discussion of tear gases by the delegates. If they had been determined to prohibit gases the experts had said were in use by police departments to prevent loss of life, they might have been expected to do so more explicitly, or at least to have discussed the point.

4. THE 1930 ATTEMPT TO RESOLVE THE QUESTION

In 1930, the United Kingdom addressed itself to the difference between the French and English texts, a difference which created "a serious ambiguity in the Geneva Gas Protocol of 1925 as well as in all Treaties and Conventions regulating gas warfare signed since the War." The United Kingdom solicited the views of

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121 League of Nations, Proceedings of the Conference for the Supervision of the International Trade in Arms and Ammunition and in the Implements of War 155 (1925) (emphasis added). An argument can be made that the conference intended a more sweeping ban on use of gas than it did on export of gas. An American proposal dealing with export had as its scope "asphyxiating, toxic or deleterious gases." Id. at 161 (emphasis added). The export proposal was rejected as impractical because a distinction between lawful and unlawful exports would present great technical difficulty. A prohibition on the use in war of agents which also had various domestic peacetime uses did not present the same difficulties. But nothing in the debates indicates that the export proposal was designed to exclude tear gases while the use-in-war proposal was not. And as indicated, the scope of the American proposal for a ban on use was described by the American delegate as "asphyxiating, poisonous, and deleterious gases."

122 Id. at 745 (emphasis added).
123 Id. at 596 (emphasis added).
124 As indicated earlier, the Senate failed to give its consent to the Geneva Protocol. During the Senate debate, an opponent of the protocol said that it "undertakes to protect us against all gases. The language of the treaty is not 'fatal gases,' or 'deadly gases.' It is 'asphyxiating, poisonous, or other gases.'" 68 Cong. Rec. 148 (1926) (remarks of Senator Reed). Later he added that this language would embrace "tear gas" which is used by police. Id. at 150. To this, the floor manager of the treaty replied: "This treaty would not interfere with that." Id. (remarks of Senator Borah). The protocol's opponent answered that it would "stop us from using that gas against the next savage race with which we find ourselves in war." Id. (remarks of Senator Reed).
other governments in order to obtain a uniform interpretation on whether or not the use of tear gases was prohibited by the protocol. The British considered that "the use in war of 'other gases,' including lachrymatory gases, was prohibited."\textsuperscript{126}

The French shared this view. Their reply stated that the English and French texts were identical in meaning and that tear gases were prohibited in war notwithstanding their use domestically by police departments.\textsuperscript{127} The delegates of 10 other states concurred, several saying that they did so because of the difficulty in distinguishing between lethal and nonlethal gases.\textsuperscript{128} A majority remained silent.

Only the United States delegate openly disagreed with the British view.\textsuperscript{129} The American representative noted the technical difficulties of classifying gases and suggested that the question be considered by the Geneva Disarmament Conference. He added:

\begin{quotation}
[W]e seek a maximum prohibition of inhumane agencies, but, at the same time, we should not be led to bring into disrepute the employment of agencies which not only are free from the reproach of causing unnecessary suffering, but which achieve definite military or civil purposes by means in themselves more humane than those in use before their adoption. I think there would be considerable hesitation on the part of many governments to bind themselves to refrain from the use in war, against any enemy, of agencies which they have adopted for peacetime use against their own population, agencies adopted on the ground that, while causing temporary inconvenience, they cause no real suffering or permanent disability, and are thereby more clearly humane than the use of weapons to which they were formerly obliged to resort to in time of emergency.\textsuperscript{130}
\end{quotation}

The preparatory commission's report noted that "the Commission felt itself unable to express a definite opinion on this question of interpretation. Very many delegations, however, stated that they were prepared to approve the interpretation suggested in the British Government's memorandum."\textsuperscript{131} The committee recognized, however, that the question remained open.\textsuperscript{132}

\textsuperscript{126} Id.
\textsuperscript{127} Id. at 311-14.
\textsuperscript{128} Id. Canada, China, Czechoslovakia, Italy, Japan, Romania, Spain, Turkey, Yugoslavia, and the U.S.S.R. agreed with France and the U.K.
\textsuperscript{129} Twenty-seven governments participated. DEP'T STATE, REPORT OF THE PREPARATORY COMMISSION FOR THE DISARMAMENT CONFERENCE 8-9 (1931).
\textsuperscript{130} LEAGUE OF NATIONS Doc. c.4.M, supra note 125, at 312.
\textsuperscript{131} DEP'T STATE, REPORT, supra note 129, at 45.
\textsuperscript{132} Id. No resolution of it has ever been achieved. In subsequent League discussions of "qualitative disarmament," tear gases were examined, the American delegate insisting that their use by police was legitimate. In 1932, a special committee on chemical and bacteriological weapons ac-
5. CURRENT INTERPRETATION

While the 1930 discussions were not conclusive of the Geneva Protocol's meaning, the then British view was widely accepted. One basis for that view, however, has since disappeared. The British were concerned that, unless tear gases were prohibited, many countries would build up their arsenals and manufacturing capabilities. But many countries have done this anyway for deleterious gases clearly prohibited by the protocol in order to be prepared to retaliate against use of gas by another country.\footnote{133}

Another concern was the difficulty of drawing a line and the danger, if the line were fuzzy, of escalation from tear gases to more harmful substances. This remains a critical problem. The United States has attempted to draw the line by restricting the permitted gases to "agents that Governments around the world commonly use to control riots by their own people."\footnote{134} This test is at least reasonably precise. It would probably legitimize only common tear gases such as CN and CS. CN, and to a lesser extent CS, are used by over 50 countries to quell domestic riots, and to capture criminals resisting arrest.\footnote{135}

In the 1966, 1967, and 1968 debates in the United Nations General Assembly and the Geneva Disarmament Conference, only the Soviet Union and its allies actively opposed the United States position that tear gases in war did not violate the protocol.\footnote{136} Belgium agreed with the American view.\footnote{137} The French, without mentioning tear gases, hinted that they no longer believed in giving the protocol the broad interpretation they had given it in the 1930's.\footnote{138} The United Kingdom and Kenya referred to the opposing

\footnote{133} See Stone, supra note 57, at 586-57. For this reason, in Stone's view, the British reasoning has been "destroyed by the facts." Id.

\footnote{134} See note 89 supra and accompanying text.

\footnote{135} See U.N.G.A. First Comm. Statement of ACDA Director Foster, supra note 46, at 742; Press conference of Secretary of Defense McNamara in Washington, March 23, 1965; Letter from Deputy Secretary of Defense Vance to Congressman Kastenmeier (D. Wis.), March 31, 1965. These gases were used for similar purposes by the British in Cyprus in 1958 and in British dependent territories on a number of occasions. See Press conference of Secretary of Defense McNamara, supra; 709 Parl. Deb., H.C. (5th ser.) 1823-26 (1965).


\footnote{138} See note 61 supra.
views on tear gas without taking sides. Most countries, however, remained silent.

6. APPLICATION OF STANDARDS TO USE OF GASES IN VIETNAM

The principal gases used by United States forces in Vietnam are the tear gases, CS and CN. However, a vomit-inducing gas, adamsite, has also been used against the enemy. Adamsite appears no longer to be authorized. It is clearly not an agent that "[g]overnments around the world commonly use to control riots by their own people." Its use represents an escalation of the kind feared by the proponents of encompassing all gases, including tear gases, within the protocol.

The use of tear gas was justified by the United States on "humanitarian" grounds—that it would reduce the number of people killed, both combatants and noncombatants, and that its use would be analogous to riot control. In situations where Viet Cong were protected by human shields, or by tunnels or caves, the alternatives were rifles, machine guns, napalm, flame throwers, high explosives, or fragmentation grenades. Tear gas certainly seemed a more humanitarian weapon. But reports from Vietnam reveal that large numbers of tear gas grenades have been dropped on Viet Cong strongholds from helicopters which were followed by B-52's dropping high-explosive or anti-personnel-fragmentation

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140 Letter from John S. Foster, Director of Defense, to Senator Brooke (R. Mass.), November 9, 1967.

141 Letter from Deputy Secretary of Defense Vance, supra note 135; S. Hersh, supra note 87, at 168, 170, 177, 179.

142 Letter from John S. Foster, supra note 140.


144 See notes 113, 114, 128 supra and accompanying text.

145 When, for example, civil authorities must enforce law and order in the face of an unruly mob, they must often decide, when other means of persuasion have been exhausted, whether to use brute force and lethal weapons, and thus risk injury and death perhaps even to innocent bystanders, or to disperse the mob by recourse to riot control agents such as tear gas, which have no harmful after-effects. And in Viet Nam, when the Viet Cong takes refuge in a village and uses innocent civilians and prisoners as shields, would it be more humane to use rifle and machinegun fire and explosive grenades to dislodge and destroy the Viet Cong and in so doing risk the lives of the innocent and wounded hostages?


We do not expect that gas will be used in ordinary military operations. Police-type weapons were used in riot control in South Viet Nam—as in many other countries over the past 20 years—and in situations analogous to riot control, where the Viet Cong, for example, were using civilians as screens for their own operations. Press Statement of Secretary of State Rusk, 52 Dep't State Bull. 529 (1965) (emphasis added).
The purpose of such an attack would appear to be to flush out those hiding in tunnels, to incapacitate them with gas, and then to wound or kill them with bombs. This seems wholly inconsistent with the humanitarian justification given by the United States. Moreover, if combatants have been incapacitated by tear gas and are thereby placed out of combat, they are entitled to be "humanely treated" under the 1949 Geneva Conventions. Indiscriminate bombing of an area just saturated with tear gas is hardly humane.

B. Herbicides

Another unsettled issue is whether the use of modern chemical herbicides or defoliants in war is a violation of the protocol. Except for their use by the United States in Vietnam, these chemicals have not been used in war. Indeed they were not discovered until the end of World War II.

The United States has taken a position on these chemicals quite similar to its position on tear gases. This is that "the Protocol does not apply to herbicides, which involve the same chemicals and have the same effects as those used domestically in the United States, the Soviet Union and many other countries to control weeds and other unwanted vegetation." The Soviet view is that the use of "chemical substances in Vietnam to include destruction of the rice crop, which as everyone knows, provides the Vietnamese peo-

146 S. Hersh, supra note 87, at 178-79.
147 Persons who take "no active part in the hostilities, including members of armed forces who have laid down their arms and those placed hors de combat by sickness, wounds, detention or any other cause shall in all circumstances be humanely treated . . . ." (Emphasis added.) Geneva Convention for the Amelioration of the Conditions of the Wounded and Sick in the Armed Forces in the Field, Aug. 12, 1949, § 3(i), [1955] 3 U.S.T. 3114, T.I.A.S. 3362. See also id. § 12. The same provision appears in the Geneva Convention Relative to the Protection of Civilian Persons in Time of War, Aug. 12, 1949, § 3(1), [1955] 3 U.S.T. 3516, T.I.A.S. 3365. Under the earlier Hague regulations, it is prohibited to kill or wound an enemy who has laid down his arms; or, having no longer any means of defense, has surrendered or offered no resistance to being taken prisoner. Regulations respecting the Law and Customs of Warfare, supra note 105, at art. 23(c). See 2 L. Oppenheim, supra note 57, at 338; Pictet, Commentary, 1 Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in the Armed Forces in the Field 52-53, 135-36 (1952).
148 The anticrop and antifoliation agents in use in Vietnam are "a mixture of the butyl esters of 2, 4-dichloro-phenoxyacetic acid and 2, 4, 5-trichlorophenoxy-acetic acid, cocodylic acid and a mixture of 2, 4 D and Tordon (4-amino-3, 5, 6-trichloropicolinic acid). All have been widely used for agricultural purposes in this and other countries." Letter from John S. Foster, supra note 140.
ple with their staple diet” is prohibited by the Geneva Protocol.\textsuperscript{150} Other countries, except for allies of the Soviet Union,\textsuperscript{151} have generally remained silent.\textsuperscript{152}

1. THE NEGOTIATING HISTORY

The scope of the ban on chemical warfare in the protocol is broad enough to cover herbicides, but there is real doubt that that was intended. Included within the chemical ban are not only the asphyxiating, poisonous and other gases but “all analogous liquids, \textit{materials} or devices . . . .”\textsuperscript{153} Taken literally, this is broad enough to include chemical agents which kill plants. It has been argued, however, that the protocol should only be applied to antipersonnel weapons.\textsuperscript{154} At least as far as its prohibition on chemicals is concerned, the negotiating history gives same support to this conclusion. As we have seen, the scope clause was derived from the 1922 Treaty of Washington and the 1919 Treaty of Versailles. At neither conference was there any recorded discussion of anticrop weapons. Certainly they were not the principal evil about which negotiators were concerned immediately after the First World War.

Before the 1925 Geneva Conference, however, a League of Nations committee asked a number of experts for a statement on the effect which would be produced on human life, animal life, and “vegetable life” by “chemical warfare”—or “bacteriological warfare.”\textsuperscript{155} The experts were not aware of any danger to plants

\textsuperscript{152} See, however, U.N.G.A. First Comm. Statement of Maltese Representative Pardo, in 1967 \textit{DOCUMENTS ON DISARMAMENT} 635. Pardo concluded that the protocol did not apply to herbicides.
\textsuperscript{153} For the language of the protocol see text at note 17 \textit{supra} (emphasis added).
\textsuperscript{154} Meyrowitz is of the view that the chemical warfare provisions of the protocol should be interpreted as “applying only to methods used directly against human beings.” Meyrowitz, \textit{supra} note 62, at 4. Later he says that “it is not clear whether or not the Protocol applies to the use of CW or BW against . . . plant life.” \textit{Id.} at 6. The 1924 experts found no chemical agent which was effective except on “human elements.” See text at note 157 infra. The \textit{Army Field Manual} states that the Hague regulation banning “poison or poisoned weapons” does “not prohibit measures being taken . . . to destroy, through chemical or bacterial agents \textit{harmless to man}, crops intended solely for consumption by the armed forces (if that fact can be determined).” \textit{The Law of Land Warfare, supra} note 1, \S 37, at 18 (emphasis added). As indicated in the text at note 105, this Hague regulation was probably subsumed in the Versailles Treaty and therefore in the anti-chemical warfare language of the protocol.
\textit{Brungs, supra} note 57, at 79-81, and \textit{Mc Dougal, supra} note 57, at 638 suggest that anticrop agents may be justifiable because food blockades are acceptable under international law.
from chemical warfare. "It would not appear that vegetation is affected by gas," they said. On chemicals, the report concluded that "no agent is at present known which could produce a chemical destruction of sources of wealth except through its action on the human elements . . . ." Most of the experts were also of the view that bacteriology was not then able to produce ineffective substances "capable of destroying a country's . . . crops." But Professor Cannon of Harvard's Medical School did "not entirely concur in this latter opinion since he admits the possibility of aeroplanes disseminating over wide areas parasites capable of ravaging the crops."

During the 1925 Geneva Conference, the Versailles-Washington language on chemicals was supplemented by a broad ban on "the use of bacteriological methods of warfare." This resulted from a Polish proposal aimed primarily at antipersonnel weapons. However, the Polish delegate also expressed concern about the possible use of bacteria on crops. He said: "Bacteriological warfare can also be waged against the vegetable world, and not only may corn, fruit and vegetables suffer, but also vineyards, orchards and fields." The acceptance of the Polish delegate's broad language prohibiting bacteriological means of warfare would seem to mean that bacteriological anticrop warfare was condemned by the protocol. At the same time, as shown above, the history of the protocol's ban on chemical warfare indicates doubt whether chemical anticrop agents were to be prohibited.

2. HERBICIDE USAGE IN VIETNAM

As we have seen, the United States explained that herbicides did not violate the protocol because they involve the same elements used in domestic weed control. The initial military use of herbicides appears to have been reasonably consistent with this justification. Herbicides were used to destroy jungle trees and plants, particularly along roads, because this vegetation was used as a cover by enemy troops from which to attack American and

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155 7 LEAGUE OF NATIONS OFF. J., supra note 91, at 121.
156 Id. at 124.
157 Id. (emphasis added). The Chinese delegate to the 1925 Geneva Conference read to the other delegates from a brochure prepared by the Women's International League for Peace and Freedom. This described the anticipated horrors of using bombs containing heavy gases to kill people in bombing large cities. The pamphlet went on: "Vegetation itself is destroyed . . . ." LEAGUE OF NATIONS, PROCEEDINGS, supra note 121, at 313.
158 7 LEAGUE OF NATIONS OFF. J., supra note 91, at 126.
159 Id.
160 LEAGUE OF NATIONS, PROCEEDINGS, supra note 121, at 340.
161 Id.
162 See note 149 supra and accompanying text.
allied soldiers. This use was not unlike the common use of herbicides to kill weeds along highways in this and other countries. Gradually, however, the South Vietnamese and then the Americans began using herbicides to kill rice crops in Viet Cong held areas. Although the chemicals remained the same as those used for certain domestic weed killers, the use was no longer "to control weeds and other unwanted vegetation", the justification given by the United States to the United Nations. As with tear gases, the political rationale given by the United States for making an exception to the protocol has been eroded by the military practice.

V. SHOULD THE UNITED STATES RATIFY THE GENEVA PROTOCOL?

The 1966 General Assembly resolution dealing with poison gas and germ warfare contained an invitation to "all States to accede to the Geneva Protocol . . ." The United States voted for this resolution. In explaining its position with respect to this invitation, the United States representative stated:

"Whether, or by what procedure, States that have not yet done so should adhere to the Geneva Protocol is for each of them to decide in the light of constitutional and other considerations that may determine their adherence to any international instruments, and particularly one which dates from 1925."

The vigorous attacks against American use of tear gas and herbicides in Vietnam have probably not produced a healthy climate for reconsideration of the Geneva Protocol by the United States Senate at the present time. However, if the Paris negotiations make progress toward reducing the level of hostilities in Vietnam, thought should be given to resubmitting the protocol to the Senate.

A. Reasons Supporting Ratification

On the assumption that the use of poison gas or germs in warfare by any country continues to be inconsistent with our national interests, ratification of the protocol is to our advantage for a number of reasons.

163 S. Hersh, supra note 87, at 144-46.
164 Id. at 147.
165 See G.A. Res. 2162(B), supra note 48. This invitation was repeated in the 1968 resolution; G.A. Res. 2454 (Dec. 20, 1968).
167 See note 150-51 supra and accompanying text; See also the petition of 5,000 U.S. scientists reported in S. Hersh, supra note 87, at 147; Mayer & Sidel, Crop Destruction in South Vietnam, Christian Century (June 29, 1968); Letter of Dr. Alje Vennema to Dr. E. W. Pleiffer, November 23, 1967, quoted in S. Hersh, supra note 87, at 183-84.
1. EFFECT ON REDUCING LIKELIHOOD OF GAS AND GERM WARFARE

The best reason for United States ratification is the increased attention and effectiveness it would give to the protocol as a barrier to the first use of chemical and biological weapons.

Our failure to adhere to the protocol has repeatedly been called to the attention of other nations by the Soviet Union and its allies. All other nuclear powers, including China, and all other major industrial nations, except for Japan, are parties. For these reasons, our accession would be regarded as important by other countries.

The 1966 United Nations resolution dealing with the protocol renewed interest in it as an instrument for maintaining continued restraint on poison gas and germ warfare. Probably as a direct result, some 12 developing countries have become parties since 1966. Our ratification would give further impetus to the effort to secure adherences.

As indicated earlier, the basic prohibition of the protocol appears to apply to nonadhering states. But many of the emerging African and Asian nations do not regard themselves as bound by rules developed as the result of practices of "colonialist" powers. Only adherence to the protocol is likely to be regarded by them as producing a serious inhibition upon their first use of gas or germ warfare. Yet these same states could acquire chemical and biological agents with much less difficulty than they could acquire nuclear weapons. Indeed chemical and biological weapons have sometimes been called the poor man's atomic bomb. The most recent use of poison gas was, after all, in Yemen. Neither that country nor Israel and Jordan are parties to the protocol. Among the emerging countries of Sub-Saharan Africa, only nine have

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168 See, e.g., the statements cited in notes 90, 150, 151 supra.
169 The parties and their dates of adherence are listed in note 25 supra.
170 Id.
172 In my view, the development of the biological and chemical warfare materials is in a way far more serious than the development of nuclear weapons. When I say "in a way" I have in mind the fact that the nuclear weapons are a rich man's property or a rich country's property—only the very rich and the super-rich can develop, manufacture and maintain them. As far as biological and chemical warfare materials are concerned... they are easily accessible to the poor countries also. That is why it is far more dangerous.
joined, all within the last five years.\footnote{For the list of parties with dates of adherence, see note 25 supra.} Mainland China and India are parties, but Japan and many less developed Asian countries are not. Latin America currently has the fewest number of parties of any major region of the world. In my view, United States adherence to the protocol would stimulate wider acceptance of it by countries in these areas, and would enhance its credibility as a deterrent to the first use of poison gas and germs in war.

2. AID IN ACHIEVING A UNIFORM INTERPRETATION OF THE PROTOCOL

The problems of interpretation arising from the differences over tear gas and herbicides, as well as from the existing reservations, have been described above. United States ratification with a statement of interpretation to be circulated in the normal course to all parties would offer a useful opportunity to clear up the meaning of the protocol.\footnote{See \textit{Restatement}, supra note 67, at § 128, comment d. The United States adopted a similar course of action recently to make clear its interpretation of the 1967 Treaty on the Prohibition of Nuclear Weapons in Latin America. For the text of the treaty see \textit{1967 Documents on Disarmament} 69. For the interpretive statement, see 58 \textit{Dep't State Bull.} 555-56 (1968). The interpretive statement which accompanied U.S. signature to a protocol to the treaty was circulated by the depositary government, Mexico, to other interested governments.}

While the ambiguity of the protocol in the case of tear gases has been recognized by several other countries, only one has publicly defended our position.\footnote{See supra notes 125, 127-28, 137, 139 supra and accompanying text.} Because of the unpopularity of the war in Vietnam and because we are not party to the protocol, our government has had little success in gaining acceptance of our interpretations. However, if we ratified with an interpretative statement after hostilities in Vietnam had subsided, most parties would probably acquiesce in our interpretation and say nothing, assuming there had been an earlier diplomatic effort to achieve this result. Given the ambiguities in the text of the protocol, the statement would most likely be accepted as an interpretation of an ambiguous provision, rather than a reservation which changed the substance of the agreement and therefore really constituted a proposal to enter into a different agreement.\footnote{See \textit{Restatement}, supra note 67, at § 124 & comment c.} Thus we would become a party to the protocol with a clear understanding on tear gas and herbicides as far as most parties were concerned.

Assuming that China and the Soviet Union objected, they would probably aim their objection at our interpretation rather than at our becoming party to the protocol. Unless they treated the interpretation as a reservation going to the heart of the protocol, which it clearly is not, they would, in effect, accept our adherence to the
protocol while continuing their differences of view with us as to its treatment of tear gas and herbicides. 178

3. IMPROVED UNITED STATES STANDING IN FORTHCOMING DISCUSSIONS OF POISON GAS AND GERM WARFARE

Starting with the 1966 discussion in the General Assembly, there has been renewed international interest in arms control agreements dealing with chemical and biological agents. In the summer of 1968, the British proposed a major addition to the Geneva Protocol which would ban the use, production, and possession of "microbiological" weapons. A British working paper submitted to the Geneva Disarmament Conference criticized the protocol for a number of reasons, including its ambiguity concerning "non-lethal gases," the failure of many states to become parties, the existence of reservations by some parties, and the limited scope of its prohibition on "bacteriological warfare" which the paper contended did not "include the whole range of microbiological agents that might be used in hostilities." 179 On this last point, the British

178 The Soviet Union would move much closer to its longstanding goal of achieving widespread adherence to the protocol by accepting the United States as a party. While it would almost certainly continue its objection to our interpretation, it would appear to have little to gain by preventing our adherence to the basic prohibitions of the protocol. Even if the Soviets regarded our interpretation as a reservation, their practice with respect to reservations would permit them to accept treaty relations despite disagreement over the matters covered by our interpretation. According to Triska and Slusser, the Soviet practice is: A treaty should be considered "valid between the state that has made the reservation and all other parties with the sole exception of that part to which the reservation pertains, unless the member opposing the reservation states directly that he is opposed to the employment of the entire convention [as] changed by the reservation in the relations between this member and the state that has made the reservation." J. TRISKA & R. SLUSSER, supra note 74, at 85.

As to Mainland China, a student of her post-1949 treaty practices has little doubt that she would disagree with our tear gas interpretation. He adds: It is far from clear, however, whether the P.R.C. [People's Republic of China] will also claim that such an interpretation or reservation denies the basic objective of the Protocol and therefore entirely invalidates the Protocol's applicability to relations between the U.S. and the P.R.C.

After summarizing the evidence, he states his belief that it is very probable that the P.R.C. will decide to reject our interpretation or reservation but that it is unlikely to declare the entire Protocol inapplicable on this ground.


working paper appears to be incorrect in light of the negotiating history of the treaty. On the others, the difficulties can be alleviated in large measure in the ways already described without amending the protocol.

The British working paper also pointed out that, even with universal adherence to the protocol, there would still be a risk of large-scale use of gas and germ warfare "as long as states have the right to manufacture them and to use them against violators and their allies." The paper therefore proposed supplementing the protocol with a ban on the possession and production of microbiological agents. The United States representative pointed out that the most important question this proposal raised was how parties could verify the fact that other parties did not possess and were not making biological agents.

180 The prohibition on "bacteriological warfare" was proposed in 1925 by Poland. At that time, many micro-organisms which are known to exist today had not been discovered. Since then, for example, viruses have been discovered, and they are not regarded as bacteria today. In 1925, however, the Polish delegate who proposed the ban on "bacteriological warfare" apparently intended to include all germ warfare within it. At the Geneva Conference, he explained that "bacteriological warfare" would include the use as weapons of "cultures of microbes [which] may easily occasion epidemics . . . ." LEAGUE OF NATIONS, PROCEEDINGS, supra note 121, at 340. His statement, and the adoption of his proposal, were preceded by an experts' report. In 1924, a Temporary Mixed Commission of the League asked technical experts from several countries what the possible effect would be of an attack by "bacteriological warfare by means of microbes or any other agent . . . ." 7 LEAGUE OF NATIONS OFF. J., supra note 91, at 121 (emphasis added). The examples of bacteriological warfare given by the experts included pollution of drinking water "by cultures of typhus or cholera germs," "propagation of plague by pest infected rats," projectiles containing "streptococci, staphylococci, anthrax spores, glanders bacilli." Id. at 125. These various germs include some (e.g., typhus) which are not regarded as "bacteria" today. But, it appears that the experts, the mixed commission and the Polish delegate all regarded "bacteriological" as including all germs or other agents for the spread of disease. There is thus no justification for limiting the scope of the ban on "bacteriological warfare" because some new diseases have been discovered since 1925 which we do not classify as bacteriological. It is for this reason that U.S. Representative Foster opposed the British view. He said that "bacteriological warfare" was also "referred to as microbial warfare, bacterial warfare, microbiological warfare, or germ warfare. We should all understand that it means disease-causing living micro-organisms, be they bacteria, or viruses or whatever they might be, used as deliberate weapons of war." U.N.G.A. First Comm. Statement of U.S. Representative Foster, supra note 179, at 22-23. Note that the terms of reference for a forthcoming U.N. experts study in this area use the terms "bacteriological" and "biological" interchangeably. See note 187 infra.

181 ENDC Statement of U. S. Representative George Bunn, ENDC/PV. 389, at 34 (1968). The British working paper recognized that "strict processes of verification are not possible." It suggested that "considera-
the British proposal received wide support in principle, a working group be formed to deal particularly with the verification problem. The Soviet Union attacked the British proposal as an attempt to subvert the Geneva Protocol. The Soviet representative said that if the conference were to follow the course suggested by the British, "we might destroy an existing, useful and important international document on the prohibition of chemical and bacteriological weapons without having replaced it by a better or indeed by any other international instrument . . . ."183

The United Kingdom proposed an expert study under the auspices of the United Nations Secretary General on the effects of the possible use of chemical weapons.184 Poland proposed such a study for both chemical and bacteriological weapons.185 The United States was prepared to accept either proposal but a consensus developed around the Polish plan. The conference recommended a study of the effects of both chemical and bacteriological weapons to the General Assembly186 which recently passed a resolution accepting the recommendations and directing that such a study be made.187

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<td>182</td>
<td>ENDC Statement of U.S. Representative George Bunn, supra note 181.</td>
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<td>183</td>
<td>ENDC Statement of Soviet Representative Roshchin, supra note 26, at 26.</td>
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<td>185</td>
<td>ENDC Statement of Polish Representative Jaroszek, PV.385, at 23 (1968).</td>
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<td>187</td>
<td>G.A. Res. 2454 (Dec. 20, 1968). The terms of reference for this study are as follows:</td>
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The aim of the report is to provide a scientifically sound appraisal of the effects of chemical and bacteriological (biological) weapons. At the same time, the report should serve to inform governments of the consequences of the possible use in war of chemical and bacteriological (biological) weapons, taking into account Resolution 2162B(XXI) of the UNGA of 5 December 1966, and should contribute to the consideration by the ENDC of the problems connected with these weapons. Chemical and bacteriological (biological) weapons should be treated by experts with experience in the respective technical fields.

The report should include the following data:

1. The basic characteristics of chemical and bacteriological (biological) means of warfare.
2. The probable effects of chemical and bacteriological (biological) weapons on military and civilian personnel, both protected and unprotected.
3. Possible long-term effects on human health and ecology.
4. Environmental and other factors affecting the employment of chemical and bacteriological (biological) means of warfare.
5. Economic and security implications of the development, acquisition and possible use of chemical and bacteriological (biological) weapons and of systems for their delivery.
This study, and the determination of the Geneva Conference to give chemical and bacteriological weapons further attention,\textsuperscript{188} indicate that a considerable amount of international effort probably will be devoted to this problem in the years ahead. The United States will no doubt continue to participate in these discussions. However, we would be more influential with the other important participants, all of whom are parties to the protocol, if we ratified it. This is particularly true since some of the proposals which will be discussed involve amendments to it. United States' interests would be better protected during the discussion of possible future agreements in this field if we became a full-fledged party to the protocol. At a minimum, ratification would limit the effect of Soviet propaganda attacks which tend now to reduce our influence with other delegates.

\textbf{B. Objections to Ratification}

\textbf{1. IMPERFECTIONS OF THE PROTOCOL}

Given the protocol's various problems, it can be argued that it is an imperfect instrument, that it needs revision, and that we should only adhere to it when it is revised.\textsuperscript{189} A procedure for alleviating many of the protocol's imperfections has been described above. The international discussions of the last two years make clear that most other countries regard the protocol as the basic instrument in the field, and some, including the Soviet Union, are adamant opposed to revising it. Moreover, the problems of inspection involved in the United Kingdom's attempt to halt production and reduce or eliminate stockpiles of germ weapons are considerable.\textsuperscript{190} Thus the chances of achieving a broad international consensus on amending the protocol, or on a new agreement, are probably not great.

We have already agreed to observe the principles and objectives of the protocol. Since other industrial states almost unanimously have adhered to it and are therefore sometimes unsympathetic to our reasons for not doing so, our insistence on a revision before we ratify is not likely to be very persuasive. We could not, in any event, promise Senate approval for the ultimate product of any efforts toward revision.

\textbf{2. DANGER OF CLOSING OUR OPTIONS}

A second objection to ratifying the protocol is that in time of war other countries would not observe it while we would. We would

\textsuperscript{188} See Report, supra note 186.

\textsuperscript{189} Cf. U.N.G.A. First Comm. Statement of Maltese Representative Pardo, supra note 152.

\textsuperscript{190} See note 181 supra. Verification problems have haunted international discussions of this subject since at least the experts' consideration in 1924. \textit{7 League of Nations Off. J.}, supra note 91.
thereby give up options to initiate the use of gas or germ warfare.

If other countries should use gas or germ weapons in a future war, we would not give up our option to retaliate in kind by ratifying the protocol.\footnote{See notes 71, 79-86 supra and accompanying text.} Moreover, we no longer have an effective option to use poison gas or germs except in retaliation. Our publicly stated policy is that we will not be the first to use these weapons. We have said we would observe the principles and objectives of the protocol. We are probably bound through custom to its basic prohibitions. Our principal allies would almost certainly restrain any desire we might have to initiate poison gas or germ warfare. The sanctions for violating the protocol, notoriety, retaliation, and war crimes prosecutions, apply even without ratification. Thus, ratification would simply acknowledge the fact that our options are already closed.

VI. CONCLUSION

The foregoing discussion shows that we have little to lose and considerable to gain by ratifying the protocol. We can increase the strength of the protocol as a barrier to poison gas and germ warfare; help to clear up a few ambiguities and, in doing so, achieve wider support for United States interpretations; and enhance our standing for influential participation in the forthcoming discussions of proposals for additional limitations. On the other hand, if we insist on waiting until the protocol is revised, we will probably have to wait a long time and then have little influence in the revision. Finally, we give up no option which is now open to us by ratifying. In my view, the protocol is the best instrument likely to be achieved in the foreseeable future. The United States would be well advised to join it.
APPENDIX

RESERVATIONS TO THE 1925 GENEVA PROTOCOL

AUSTRALIA
Subject to the reservations that His Majesty is bound by the said Protocol only towards those Powers and States which have both signed and ratified the Protocol or have acceded thereto, and that His Majesty shall cease to be bound by the Protocol towards any Power at enmity with Him whose armed forces, or the armed forces of whose allies, do not respect the Protocol.

BELGIUM
(1) The said Protocol is only binding on the Belgium Government as regards States which have signed or ratified it or which may accede to it.
(2) The said Protocol shall ipso facto cease to be binding on the Belgian Government in regard to any enemy State whose armed forces or whose Allies fail to respect the prohibitions laid down in the Protocol.

BRITISH EMPIRE
Does not bind India or any British Dominion which is a separate Member of the League of Nations and does not separately sign or adhere to the Protocol.
(1) The said Protocol is only binding on His Britannic Majesty as regards those Powers and States which have both signed and ratified the Protocol, or have finally acceded thereto;
(2) The said Protocol shall cease to be binding on His Britannic Majesty towards any Power at enmity with Him whose armed forces, or the armed forces of whose allies, fail to respect the prohibitions laid down in the Protocol.

BULGARIA
The said Protocol is only binding on the Bulgarian Government as regards States which have signed or ratified it or which may accede to it.
The said Protocol shall ipso facto cease to be binding on the Bulgarian Government in regard to an enemy State whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol.

CANADA
(1) The said Protocol is only binding on His Britannic Majesty as regards those States which have both signed and ratified it, or have finally acceded thereto;
(2) The said Protocol shall cease to be binding on His Britannic Majesty towards any State at enmity with Him whose armed forces, or whose allies de jure or in fact fail to respect the prohibitions laid down in the Protocol.
CHILE
(1) The said Protocol is only binding on the Chilian Government as regards States which have signed or ratified it or which may definitely accede to it.
(2) The said Protocol shall ipso facto cease to be binding on the Chilian Government in regard to any enemy State whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol.

CZECHO-SLOVAKIA
The Czecho-Slovak Republic shall ipso facto cease to be bound by this Protocol towards any State whose armed forces, or the armed forces of whose allies, fail to respect the prohibitions laid down in the Protocol.

ESTONIA
(1) The said Protocol is only binding on the Estonian Government as regards States which have signed or ratified it or which may accede to it.
(2) The said Protocol shall ipso facto cease to be binding on the Estonian Government in regard to any enemy State whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol.

FRANCE
(1) The said Protocol is only binding on the Government of the French Republic as regards States which have signed or ratified it or which may accede to it.
(2) The said Protocol shall ipso facto cease to be binding on the Government of the French Republic in regard to any enemy State whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol.

INDIA
(1) The said Protocol is only binding on His Britannic Majesty as regards those States which have both signed and ratified it, or have finally acceded thereto;
(2) The said Protocol shall cease to be binding on His Britannic Majesty towards any Power at enmity with Him whose armed forces, or the armed forces of whose allies, fail to respect the prohibitions laid down in the Protocol.

IRAQ
On condition that the Iraq Government shall be bound by the provisions of the Protocol only towards those States which have both signed and ratified it or have acceded thereto; and that they shall not be bound by the Protocol towards any State at enmity with them whose armed forces, or the forces of whose allies, do not respect the dispositions of the Protocol.
IRELAND
The Government of Ireland does not intend to assume, by this accession, any obligation except towards the States having signed and ratified this Protocol or which shall have finally acceded thereto, and Should the armed forces of an enemy State or of the allies of such State fail to respect the said Protocol, the Government of Ireland would cease to be bound by the said Protocol in regard to such State.

THE NETHERLANDS (including Netherlands, Indies, Surinam and Curacao)
Subject to the reservation that, as regards the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, this Protocol shall ipso facto cease to be binding on the Royal Netherlands Government in regard to any enemy State whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol.

NEW ZEALAND
Subject to the reservations that His Majesty is bound by the said Protocol only towards those Powers and States which have both signed and ratified the Protocol or have acceded thereto, and that His Majesty shall cease to be bound by the Protocol towards any Power at enmity with Him whose armed forces, or the armed forces of whose allies, do not respect the Protocol.

PORTUGAL
(1) The said Protocol is only binding on the Government of the Portuguese Republic as regards States which have signed or ratified it or which may accede to it.
(2) The said Protocol shall ipso facto cease to be binding on the Government of the Portuguese Republic in regard to any enemy State whose armed forces or whose allies fail to respect the prohibitions laid down in the Protocol.

ROMANIA
Subject to the reservation:
(1) That the said Protocol only binds the Romanian Government in relation to States which have signed and ratified or which have definitely acceded to the Protocol.
(2) That the said Protocol shall cease to be binding on the Romanian Government in regard to all enemy States whose armed forces or whose allies de jure or in fact do not respect the restrictions which are the object of this Protocol.

SPAIN
Declares this Protocol as compulsory ipso facto and without special
agreement, in relation to any other Member or State accepting and executing the same obligation, that is to say, on condition of reciprocity.

UNION OF SOUTH AFRICA
Subject to the reservations that His Majesty is bound by the said Protocol only towards those Powers and States which have both signed and ratified the Protocol or have acceded thereto, and that His Majesty shall cease to be bound by the Protocol towards any Power at enmity with Him whose armed forces, or the armed forces of whose allies, do not respect the Protocol.

UNION OF SOVIET SOCIALIST REPUBLICS
(1) That the said Protocol only binds the Government of the Union of the Soviet Socialist Republics in relation to the States which have signed and ratified or which have definitely acceded to the Protocol.
(2) That the said protocol shall cease to be binding on the Government of the Union of Soviet Socialist Republics in regard to all enemy states whose armed forces or whose allies de jure or in fact do not respect the restrictions which are the object of this Protocol.