IHL MODULE 3 – Limitations on Means and Methods of Warfare

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WHAT IS-WHY IS THERE THE LAW OF WAR

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INTRODUCTION

Writing in 1832, Clausewitz maintained[1] that

> to impose our will on the enemy is [the] object of force. ...The fighting force must be destroyed: that is they must be put in such a condition that they can no longer carryon the fight. ...War is an act of force, there is no logical limitation to the application of force. ...*Attached to force are certain imperceptible limitations hardly worth mentioning, known as international law and custom, but the;' scarcely weaken it*. ...[In fact,] kind-hearted people might ..think there was some ingenious way to disarm or defeat an enemy without too much bloodshed, and might imagine that is the true goal of the art of war. Pleasant as it sounds, it is a fallacy that must be exposed: war is such a dangerous business that the mistakes which come from kindness are the very worst.' ...[However,] if civilized nations do not put their prisoners to death or devastate cities and countries, it is because intelligence plays a larger part in their methods [than was the case among savages] and has taught them more effective ways of using force than the crude expression of instinct.

In response to this assertion, it might be said that the very "intelligence" to which he refers as playing a larger part in the methods of warfare in fact expresses itself in the very rules of international law and custom that he cynically derides as "hardly worth mentioning." As if to confirm this, reference may be made to the comment by General Colin Powell when submitting a report to the U.S. Congress "On the Role of the Law of War" during Operation Desert Storm.[2] In opening his report, the General stated "Decisions were impacted by legal considerations at every level, [the law of war] proved-invaluable in the decision-making process."

Before we can legitimately comment on the issue of legal control-the *jus in bello*--it is necessary to pay some attention to the lawfulness of war itself-the *jus ad bellum*. In earlier

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[1] K. von Clausewitz, *On War*, Eng. tr., M. Howard & P. Paret, Harmondsworth, Penguin, Bk. I, ch. 1, para. 2, ch. 2, 75, 90. ch.l, paras. 3,77,2,3,75,76 (emphasis in original), 1976.

[2] Dept. of Defense Report to Congress. 10 Apr. 1992, App. 0, 31 ILM. 612.615.

times this meant deciding whether the war was being fought for a 'just" cause and this largely depended on whether it received the approval of the church,[3] although in accordance with the views of Machiavelli this soon came to mean that any war in which a Christian prince was engaged was obviously "just"[4] and "a necessary war is a just war,"[5] while the "fathers" of international law sought to set out a variety of causes which would enable a ruler-justly-to resort to the use of force, normally in the name of self-defense. With the rise of socialism and the workers' movement, the concept of 'justness" shifted, so that the only 'just war" was the "class war." However, in practice this was shown to be nothing but an ideology, for with but few exceptions even the "workers" were prepared to defend their country when a victim of aggression.

LEGALITY OF WAR

The first international steps towards declaring war illegal came with -the adoption of the Covenant of the League of Nations.[6] While this did not expressly ban war, it sought to limit the occasions on which a League member could resort to force. In accordance with Article 16, "should any Member of the League resort to war in disregard of its covenants..., it shall ipso facto be deemed to have committed an act of war against all Members of the League," laying itself open to the imposition of economic sanctions, although in practice, as demonstrated in, for example, the Italo-Ethiopian war, this did not really amount to a great deal. The practical difficulty of forbidding war and making resort thereto an offence against international law, may be seen in the fate of the draft Treaty of Mutual Assistance drawn up by the League Assembly in 1923.[7] This solemnly proclaimed "that aggression is an international crime, "with the parties undertaking that "no one will be guilty of its commission." The "criminal' penalty envisaged was purely financial. Since it proved impossible to define "aggression," the treaty remained a draft. The same fate befell the 1924 Draft Treaty of Disarmament and Security.[8] Equally abortive was the League's Geneva Protocol for the Pacific Settlement of International Disputes of 1924.[9] By this, "a war of aggression constitutes a violation of [the] solidarity [of the members of the international community] and an international crime ...and [with a view to] ensuring the repression of international crimes," the parties forswore war save by way of "resistance to acts of aggression or when acting in agreement with the Councilor the Assembly of the League of Nations in accordance with provisions of the Covenant and of the present Protocol." As with earlier exercises, there was no provision for criminal liability, other than financial sanctions. The same is true of the various hortatory or declaratory resolutions to similar effect adopted by both the League Assembly and the Conference of American States. This dearth did not, however, inhibit the International Military Tribunal at Nuremberg from resting part of its finding that aggressive war was criminal under international law on these nonbinding instruments. [10]

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[3] See, e.g., R. Regout, *La Doctrine de la guerre juste*, Pedone, Paris, 1935; R.E. Santoni, "Nurturing the Institution ofWar: Just War Theory's Justifications and Accommodations," in R. A. Hinde, The Institutions of War, Macmillan, Basingstoke, 1991; M. Walzer, *Just and Unjust Wars*, Basic Books, New York, 1977.
[4] It was rare "that a good man should be found willing to employ wicked means," *The Discourses*, 1532, Bk. I, ch. xviii.
[5] *The Prince*, 1513, xxvi.
[6] Treaty of Versailles, 1919, Ch. 1,12 B.F.S.P. 1; 13 Am. J. Int'l Law, Supp. 2; F. L. Israel, Major Peace Treaties of Modern History, 1648-1967, McGrawHill, New York, 1967, vol. 2, 1265.
[7] See B. Ferencz, *Defining International Aggression*, Oceana, 1979, Vol. 1,77.
[8] *Id*., 124.
[9] *Id*., 132.
[10] Judgment, 1945, HMSO, Cmd. 6964 (1946), 39-41; 41 Am. J. lnt'l Law 218-20; Ferencz, *op. cit.*, 486-8.

It was not until 1928, when U.S. Secretary of State Kellogg and French Foreign Minister Briand proposed the agreement that carries their name, officially the Pact of Paris for the Renunciation of War,[11] that any treaty dealing with the "legality" of war was adopted. The Pact was somewhat simple in its terms, merely stating that the High Contracting Parties-by the outbreak of World War II this included almost all independent states-"condemn recourse to war for the solution of international controversies, and renounce it as an instrument of national policy [and] agree that the settlement of or solution of all disputes or conflicts of whatever nature or of whatever origin they may be, which may arise among them, shall never be brought about except by peaceful means."

The sole sanction indicated in the Pact is to deny any offender the benefits provided by it. An appreciation of what this might mean is to be found in the Articles of Interpretation adopted by the International Law Association at its Budapest meeting in 1934.[12] Having stated the obvious-that a party resorting to armed force to solve an international dispute "is guilty of a violation of the Pact," as is any state assisting such a violator-the Articles go on to provide that a victim of such a violation as well as all other signatories "*may*"-not "shall"-deny the violator all the rights of a belligerent and to excuse them from any of the normal obligations attaching to neutrality, so that they would be entitled to assist the victim with finances, supplies and even armed forces. Moreover, the aggressor would not be entitled to receive recognition either *de facto* or *de jure* of any territorial or other advantage ensuing from the aggression. Finally, the aggressor would be liable to pay compensation for all damage incurred by any party as a result of the breach.

It is noticeable that the Budapest Articles of Interpretation say nothing about the criminality of an act of aggression in breach of the Pact. Nevertheless, the Nuremberg Tribunal apparently found no difficulty in asserting that

> the solemn renunciation of war as an instrument of national policy [in the Pact] necessarily involves the proposition that such a war is illegal in international law; and that those who plan and wage such a war. ..are committing a crime in so doing. ...War [is] essentially an evil thing. Its consequences are not confined to the belligerent states alone, but affect the whole world. To initiate a war of aggression, therefore, is not only an international crime; it is the supreme international crime differing only from other war crimes in that it contains within itself the accumulated evil of the whole.

This statement calls for comment. In the first place, the Tribunal has ignored that not every breach of an agreement-nor even of legislation - constitutes a crime. Secondly, the interpretation of the Pact in this way is completely gratuitous and unnecessary. By Article 6 (a) of the London Charter establishing the Tribunal,[13] among the crimes against peace over which the Tribunal is granted jurisdiction are included "planning, initiation or waging of a war of aggression, or a war in violation of international treaties. ..." It follows, therefore, that it is the constituent instrument of the Tribunal that has rendered criminal a war of aggression or breach of the Pact, which is merely an "international treaty." It was thus completely redundant for the Tribunal to go into any detailed study of draft or other documents to ascertain whether such a war was criminal or not.

[11] 94 LNTS 57; TIAS 796.
[12] *Reprinted in* 29 Am. J. lnt'l Law. 93.
[13] 1945, 82 UNTS 280; 59 Stat. 1544; Schindler and Toman, *The Laws of Armed Conflicts*, 1988,911.

Not even the Charter of the United Nations, at least not *expressis verbis*, speaks of the criminality of war. Article 2, (paragraphs 3 and 4), simply provides that

> [A] 11 Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered. [They] shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or act in any other manner inconsistent with the Purposes of the United Nations.

The only clear sanction should these commitments be ignored depends on the Security Council and its decision to invoke the provisions in Chapter VII relating to a threat to the peace, a breach of the peace or an act of aggression. Should the Council authorize military action in such circumstances, those complying with the decision are not in breach of any legal requirement. Other than this, the only recourse to armed conflict that is permitted under the Charter is by way of self -defense against an armed attack, so that any other recourse to arms would constitute an act of aggression and constitute a crime in the light of the Nuremberg judgment, for the General Assembly has affirmed the Principles of International Law Recognized by the Charter of the Nuremberg Tribunal[14] and has authorized the International Law Commission to draw up a Statement of Principles Recognized in the Charter of the Nuremberg Tribunal and in the Judgment of the Tribunal,[15] and these Principles are now generally regarded as constituting part of international customary law.

Even if it is claimed that a resort to arms is in accordance with Article 51 of the Charter, problems may arise as to whether the claim is justified and the resort in self- defense is legal. By Article 51, this may be only in response to an armed attack. However, the Article describes the right as being "inherent," which raises the question whether it may be resorted to by way of preventive or anticipatory action;[16] it is hardly likely that the draftsmen of the Charter intended a "victim" to wait until it was, for example, devastated by nuclear attack before taking steps to defend itself. Moreover, since the right is "inherent,"[17] it cannot be presumed that the members of the United Nations have less right to defend themselves than do nonmembers. War, other than under these conditions, would constitute aggression and thus amount to an international crime in accordance with the exposition of the law as given at Nuremberg.

If war is illegal and criminal, some wonder, how can one speak of the law of war? Is this not completely out of line with the normal rules concerning criminal law? It is not usual practice to declare an act to be a crime and then lay down rules as to how that crime is to be committed? Such an approach, however, betrays a lack of historical knowledge and any appreciation of the purpose of the law of war. Even in the Old Testament there are instances of the significance of restraints on the conduct of war. During their conquest of Canaan, the Israelites conducted many campaigns of total destruction, but this happened only when the war in which they were engaged was undertaken at the direct order of God and was directed against heathens who had rejected Him; to show mercy then would be a sin against the

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[14] Res. 95 (1),1946, *id*. at 921.
[15] 1950, *id*. at 923.
[16] *See*, e.g., Dinstein, *War; Aggression and Self-Defence*, Cambridge Univ. Press, 182-7 (1994).
[17] 17 *Id*. at 179-82.

Lord.[18] Even in such a war, however, they were exhorted to have recourse to siege only if the city involved had rejected an opportunity to surrender:

[W]hen thou comest nigh unto a city to fight against it, then proclaim peace unto it. And ...if it make thee answer of peace, and open unto thee, then... all the people...found therein shall be tributaries unto thee. And if it will make no peace with thee, but will make war against thee, then shalt thou besiege it. And when the Lord thy God hath delivered it into thine hands, thou shalt smite every male thereof with the edge of the sword: But the women, and little ones, and the cattle, and all that is in the city, even all the spoil thereof, shalt thou take unto thyself; and thou shalt eat the spoil of thine enemies. ...When thou shalt besiege a city a long time in making war against it to take it, thou shalt not destroy the trees thereof by wielding an axe against them; for thou mayest eat of them, but thou shalt not cut them down; for is the tree of the field man, that it shall be besieged of thee? Only the trees of which thou knowest that they are not trees for food, them thou mayest destroy and cut down, that thou mayest build bulwarks against the city that makes war with thee, until it fall."[19]

It would appear, therefore, that ecological considerations were significant even then, forbidding destruction of resources essential to the survival of man. Maimonides, perhaps the greatest of Jewish Diaspora scholars, states that the destruction of fruit trees for the mere purpose of afflicting the civilian population is prohibited, and Rabbi Ishmael goes so far as to state that "not only...fruit trees but, by argument from minor to major, stores of fruit itself may not be destroyed."[20]

PROTOCOLS OF 1949 & 1977

Not until Protocol I to the Geneva Conventions of 1949 was adopted in 1977 was a similar principle embodied in the international black-letter law of armed conflict. Even then, "objects indispensable to the civilian population" may not be attacked or destroyed, unless they "are used. ..as sustenance solely for the members of [the adverse party's] forces. ..or in direct support of military action," but in the latter case care must be taken to ensure that the civilian population is not left "with such inadequate food or water as to cause its starvation or force its movement."[21]

The Israelites were also enjoined to restrain themselves in their dealings with enemy combatants. Thus, "rejoice not when thine enemy falleth, and let not thine heart rejoice when he stumbleth; lest the Lord see it, and it displeases Him, and He turn away His wrath from."[22] Moreover, as far as prisoners of war are concerned, "if thine enemy be hungry, give him bread to eat; and if he be thirsty, give him water to drink." This injunction goes so far as to inspire the prophet Elisha to reply to the king's inquiry whether he might kill his prisoners: "Thou shalt not smite them: wouldst thou smite those whom thou hast taken captive with thy sword and with thy bow? Set bread before them, that they may eat and drink and go to their

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[18] See, e.g., I Samuel 15, wherein the prophet himself kills Agag.
[19] Deuteronomy XX:I0-I4, 19-20.
[20] G. B. Roberts, "Judaic Sources and Views on the Laws of War," 37 Naval L.R. 221,231 (1988); see also L. C. Green, "The Judaic Contribution to Human Rights," 28 Can. Y.B. Int'l Law 3 (1989)
[21] Protocol Additional to the Geneva Conventions of Aug. 12, 1949 and Relating to the Protection of Victims of International Armed Conflicts, Schindler and Toman, *op. cit.*, 621, Art. 54.
[22] Proverbs XXIV: 2117.

master. And he prepared great provision for them: and when they had eaten and drunk, he sent them away and they went to their master"[23]

Even in those instances when the Torah or the Prophets indicated that extreme action be taken against an enemy, "the rabbis softened the impact of much of the old law through reinterpretation or imaginative explanation. Due to this it seems that the Israelites were indeed a "merciful" people when compared with their neighbors, such as the Assyrians. Although, as in any case, exceptions and violations to regulations occurred, on the whole, the Israelite warriors conducted themselves in a disciplined, restricted manner in accordance with rules and regulations derived from divine inspiration."[24] However, breaches of these injunctions were, for the most part, subject only to divine punishment.

The Israelites were not alone among the ancients whose conduct of war was under restraint. Sun Tzu's *The Art of War* is one of the most ancient commentaries on warfare, and in his view, [25]"[g]enerally in war the best policy is to take a state intact; to ruin it is inferior to this. To capture the enemy's army is better than to destroy it; to take intact a battalion, a company or a five-man squad is better than to destroy them. ...To subdue the enemy without fighting is the acme of skill. ...The worst policy is to attack cities. Attack cities only when there is no alternative." Even as early as the seventeenth century B.C., the Chinese were applying what may only be described as principles of chivalry when engaged in conflict, it being "deemed unchivalrous. ..[to take] advantage of a fleeing enemy who was having trouble with his chariot. ..[or to] attack an enemy state. ..when it was divided by internal troubles."[26]

Similarly, some measures of humanitarianism are to be found in both the *Ramayana*[27] and the *Mahabharata*,[28] postulating a series of principles regulating conduct in war, many of which have been accepted only recently as part of the modern law of war. "When he fights his foes in battle, let him not strike with weapons concealed in wood, nor with such as are barbed, poisoned, or the points of which are blazing with fire.[29] Neither poisoned nor barbed weapons should be used. These are weapons of the wicked."[30] Foretelling the modern rule relating to proportionality[31] as well as the ideological - and unrealistic - view of those who assert that sophisticated weapons should not be used against unsophisticated peoples: "a car warrior [one engaged in transporting weapons] should fight a car warrior. One on horse should fight one on horse. Elephant riders must fight with elephant riders, as one on foot fights a foot soldier. When the antagonist has fallen into distress he should not be struck: brave warriors do not shoot at one whose arrows are exhausted. No one should strike another that is retreating[32] ...let him remember the duty of honourable warriors; do not kill a man when he is down, even a wicked enemy, if he seeks shelter, should not be slain." The Sanskrit

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[23] Proverbs XXV: 21, and 2 Kings VI: 22-23.
[24] Roberts, *loc. cit.*, 233.
[25] Written about 6th century B.C., tr. S. B. Grriffith, Oxford Univ. Press, 78-9 {1963).
[26] J. Keegan, *A History of Warfare; c. Creel, The Origin of Statecraft in China*, 1970,257, 265
[27] Sanskrit epic written in 3rd century B.C.
[28] Epic Sanskrit poem based on Hindu ideals, probably composed between 200 B.C. and 200 A.D.
[29] It was not until 1980 with Protocols II and III annexed to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to Have Indiscriminate Effects (D. Schindler and J. Toman, *The Laws of Armed Conflicts*, 1988) that booby traps and incendiaries were placed under any form of restriction.
[30] *See* below, discussion of weapons considered anathema to the Church.
[31] *See*, e.g., W. J. Fenrick, "The Rule of Proportionality and Protocol I in Conventional Warfare," 98 Mil. L. R. {1982).
[32] It is not always easy to determine whether the enemy is retreating or merely withdrawing to reform.

writers, in their treatment of noncombatants, remind us of the remark attributed to Fluellen in Shakespeare's Henry V when at Agincourt, 1415, he says, "Kill the boys and take the luggage! 'Tis expressly against the law of arms: 'tis as arrant a piece of knavery. ..as can be offer'd."[33] These early epics warn us that "car-drivers, men engaged in the transport of weapons. ..should never be slain. No one should slay him who goes out to procure forage or fodder, camp followers or those that do menial service. No one should kill him that is skilled in a special art. He is no son of the Vishni race who slayeth a woman, a boy or an old man. Let him not strike one who has been grievously wounded. A wounded opponent shall either be sent to his own home, or if brought to the victor's quarters, have his wounds attended to, and when cured he shall be set at liberty. This is eternal duty.[34] Night slaughter is horrible and infamous. With death our enmity has terminated, " so that any desecration of a corpse, such as taking of ears or other mementos, was forbidden. Finally, as to the treatment of occupied territory and its inhabitants, "customs, laws and family usages which obtain in a country should be preserved when that country has been acquired. Having conquered the country of his foe, let him not abolish or disregard the laws of that country. A king should never do such injury to his foe as would rankle in the latter's heart."[35]

RULES OF WAR – RETRACING THE ROOTS

It becomes evident from these examples that many of the rules of the ancients go further than what is to be found in either the Hague or the Geneva 1aw.[36] They indicate that the ancients considered war an unfortunate occurrence, with the ensuing damage to be kept to a minimum and every effort made to secure a peaceful and fruitful future for both the victor and the vanquished. This interpretation accords with that of Gibbon commenting on the behavior of the Scythians in the fifth century: "In all their invasions of the civilized empires of the South, the Scythian shepherds have been uniformly actuated by a savage and destructive spirit. The laws of war that restrain the exercise of national rapine and murder, are founded on two principles of substantial interest: the knowledge of the permanent benefits which may be obtained by a moderate use of conquest; and a just apprehension lest the desolation which we inflict on the enemy's country may be retaliated on our own. But these considerations of hope and fear are almost unknown in the pastoral state of nations."[37] One sometimes wonders whether they are any more known or applied in industrial states!

Long before the period to which Gibbon was referring, there was some regulation of what was allowed during war. This becomes clear if one looks to the practice of ancient Greece and Rome in which urban centers in the form of cities and city states were well established. A leading commentator has said[38]:

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[33] Act 4, Scene 7, 11.5-10. This statement relates to Henry's order to kill the French prisoners as a reprisal for the slaughter of the "boys." Shakespeare, seemingly, based his account on Holinshed's *Chronicles*, but a somewhat different version is found in Vattel, *Le Droit des Gens*, Liv. III, ch. VIII, s.151 (1758}. See generally, also T. Meron, *Henry's Wars and Shakespear' s Laws*, 1993.

[34] *See*, e.g., L. C. Green, *Essays on the Modern Law of War*, "War Law and the Medical Profession," at 103 (1985).

[35] All these examples are taken from W. S. Armour, "Customs and Warfare in Ancient India," 8 Transactions of the Grotius Society 71,73-7, 81 (1922)

[36] These terms are given to the two branches of the law of armed conflict, the Hague Law being the Conventions of 1899 and 1907, and the Geneva law referring to the Red Cross Conventions of 1949 as amended in 1977. The two together are commonly described as "humanitarian law."

[37] E. Gibbon, *The Decline and Fall of the Roman Empire*, 1776-88, ch. 34 (Bury ed., 1909, vol. 3, 450).

[38] C. Phillipson, The *International Law and Custom of Ancient Greece and Rome*, vol. 2 (1911),195, 207-10,221-3; see also Thucydides, *The Peleponnesian War*, Hobbes tr. 1676, 79 et seq.; and Phillipson, 212.

> The rule and principles of war were considered by both Hellas and Rome to be applicable only to civilized sovereign States properly organized, and enjoying a regular constitution; and not conglomerations of individuals living together in an irregular and precarious association. Rome did not regard as being within the comity of nations such fortuitous gatherings of people, but only those who were organized on a civilized basis, and governed with a view to the general good, by a properly constructed system of law. ...Hence barbarians, savage tribes, bands of robbers and pirates, and the like were debarred from the benefits and relaxations established by international law and custom. ...[A]s to the general practice of war in Hellas[,] we find remarkable oscillations of wartime policy. Brutal treatment and noble generous conduct are manifested at the same epoch, in the same war, and apparently under similar circumstances. At times we hear of proceedings which testify to the intellectual and artistic temperament of the Greeks; at other times, we read narratives which emphasise the fundamental cruelty and disregard of human claims prevalent amongst the ancient races when at war with each other. In Homer. ..hostilities for the most part assumed the form of indiscriminate brigandage, and were but rarely conducted with a view to achieving regular conquests, and extending the territory of the victorious community. Extermination rather than subjection of the enemy was the usual practice. ...Sometimes prisoners were sacrificed to the gods, corpses mutilated and mercy refused to children, and to the old and sickly. On the other hand, acts of mercy and nobility were frequent. ...The adoption of certain cowardly, inhuman practices, such as, for example, the use of poisoned weapons, was condemned. ...[39]
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> In reference to the conduct of war in Greece, it is important to remember that it was between small States, whose subjects were to an extraordinary degree animated by patriotism and devotion to their mother-country, that every individual was a soldier-politician who saw his home, his life, his family, his gods, at stake, and finally, that he regarded each and every subject of the opposing States as his personal adversary. ...[40] [Nevertheless,] temples, and priests, and embassies were considered inviolable. ...Mercy was shown to. ..helpless captives. Prisoners were ransomed and exchanged. Safe-conducts were granted and respected. Truces and armistices were established and, for the most part, faithfully observed. ...Burial of dead was permitted; and graves were unmolested. It was considered wrong and impious to cut off or poison the enemy's water supply, or to make use of poisoned weapons. Treacherous stratagems of every description- were condemned as being contrary to civilized warfare. And. ..it is essential to emphasize that the non-existence of the law and universally accepted custom relating to them is not necessarily proved when we point here and there to conduct of a contrary nature [a point which is not always sufficiently acknowledged in our own time].

The same commentator goes on to point out[41] that by the time of the Roman empire the nature of the state had changed, with Rome a centralized authority.

> [Now, the practices in war] varied according as their wars were commenced to exact vengeance for gross violations of international law, or for deliberate acts of treachery.

[39] *See, e.g.*, Homer, The Odyssey, Lattimore tr., 1965,34, Bk. I, 1I.260--()3, 221-3
[40] A similar tendency is to be found in modem civil wars.
[41] Phillipson, *op. cit*., 227, 228-30.

> Their warlike usages varied also according as their adversaries were regular enemies. ..or uncivilized barbarians[42] and bands of pirates and marauders. ...The Roman conduct [under Germanicus] far transcended in its civilized and humane character that of the German leader, Arminius, who is reported [by Tacitus[43]] to have burnt to death and otherwise barbarously[44] slain the centurions and tribunes of the Varian legions, and nailed their skulls to trees. Undoubtedly, the belligerent operations of Rome, from the point of view of introducing various mitigations in the field, and adopting a milder policy after victory,[45] are distinctly of a progressive character. They were more regular and disciplined than those of any other ancient nation. They did not as a rule degenerate into indiscriminate slaughter and unrestrained devastation. The ius belli imposed restrictions on barbarism, and condemned all acts of treachery. ., .[Livy tells US[46]] there were laws of war as well as peace, and the Romans had learnt to put them into practice not less justly than bravely. , ..The Romans [says Cicero[47]] refuse to countenance a criminal attempt made on the life of even a foreign aggressor. ...

In so far as Islam is concerned, the Caliph Abu Bakr commanded his troops,[48] "let there be no perfidy, no falsehood in your treaties with the enemy, be faithful to all things, proving yourselves upright and noble and maintaining your word and promises truly." The ninth century Islamic statement on the law of nations bans the killing of women, children, the aged, the blind, the crippled and the helpless insane.[49] Moreover, while fighting was in progress between the *dar al-Islam* (the territory of Islam) and the *dar al-harb* (the rest of the world, also known as the territory ofwar). "Muslims were under legal obligations to respect the rights of non-Muslims, both combatants and civilians"; booty did not belong to the captor, but was to be shared according to set rules. "The prisoner of war should not be killed, but he may be ransomed or set free by grace," although if it would be advantageous to the Muslims, non-Muslim prisoners could be killed unless they converted, when they would be regarded as booty.,[50]

Once we come to the age of chivalry, we find the role of the Church significant, particularly as it frequently reflected the desires of the orders of knighthood, Thus, the condemnation of the use of the crossbow and the arc by the Second Lateran Council, 1139, coincided with the views of the knightly orders who fought hand-to-hand, and considered such weapons disgraceful since they could be used from a distance, by an unseen foe including villeins (feudal serfs), enabling a man to strike without the risk ofbeing struck himself.[51] The ax, mace, halberd, ball-and-chain, military fork and a variety of lances used by the knights for close combat and dismounting an opponent are merely up-to-date variants of the striking weapons of the ancients, which were "confined to arm-, foot- or mouth-propelled instruments [as well as] war-hammers, battle-axes, and swords; thrusting spears; and missile weapons,

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[42] See below, German War Book on use of colonial African troops in European wars.
[43] *Annals* I, 61.
[44] This is the term used by Tacitus.
[45] This does not accord with the treatment meted out to Britain after the defeat of Boudicca.
[46] History of Rome, v, 27.
[47] *De Officiis*, I, II.
[48] Alib Hasan Al Muttaqui, Book of Kanzul'umman, vol. 4 (1949) 472; see also *The Islamic Law of Nations* (Shaybani's Siyar, (c. early 9th century), tr. Khadduri (1966), s,1711.
[49] *Id*., ss. 29-32,47,81, 110-11
[50] Khadduri, *op. c*it., Intro, 13, ss. 2-38,54-60,148-371,44.
[51] Draper, "The Interaction of Christianity and Chivalry in the Historical Development of the Law ofWar," 5 Int'l Rev. Red X 3, 19 (1965). Cp. the attitude of Kapitanleutnant (Ing) Lenz at his trial for war crimes in 1945, *The Peleus Trial*, 1 UNWCC, Law Reports of Trials of War Criminals, 1,3-4.

such as the hurled spear, or javelin, the arrow propelled by arm- or foot drawn bow, or the blow-pipe. The striking edge or point of these weapons is of hardwood, stone, bone, or metal. ..,"[52]

As iron-clad warriors[53] disappeared, their specialized weapons fell into desuetude and are now considered illegal. The process of condemnation and potential rejection was assisted by the Church, anathematizing such weapons as darts and catapults, "in order to reduce as far as possible the engines of destruction and death."[54] Despite the condemnation of weapons causing numerous deaths, gunpowder was soon in common use, although in 1439, "when the army of Bologna, using a new handgun, killed a number of plate-armoured Venetians, feeling ran so high at this disregard for the game of war, that the victorious Venetians massacred all prisoners who had stooped so low as to use this "cruel and cowardly innovation," gunpowder. It would, if unchecked, they said, make fighting a positively DANGEROUS profession."[55] Such disregard of the rules led Belli to comment a century later,[56] "today regard is so far lacking for this [Church] rule that firearms of a thousand kinds are the most common and popular implements of war, as if too few avenues of death had been discovered in the centuries, had not the generations of our fathers, rivaling God with his lightning, invented this means whereby, even at a single discharge, men are sent to perdition by the hundreds."

The "law of chivalry" was nothing but a customary code of chivalrous conduct recognized by the feudal knights as controlling their affairs.[57] This was enforced by specially appointed arbitrators and even by Courts of Chivalry.[58] As early as 1307 such courts were trying breaches of parole,[59] considered a major disregard of the "law of arms," a system so well recognized that when, in 1370 at the siege of Limoges, the English commander issued orders forbidding quarter, three captured French knights appealed to John of Gaunt and the Earl of Cambridge, "My Lords we are yours: you have vanquished us. Act therefore to the law of arms," and their lives were spared and they were treated as prisoners[60] who could, of course, be ransomed. The principles of the law of arms were sufficiently well recognized by the time of Elizabeth that, as has already been pointed out, Shakespeare could make specific reference to them when writing of Henry V's conduct at Agincourt.[61]

By the middle of the fifteenth century, the Constable of France was trying a variety of *ecorcheur* captains for war crimes.[62] Perhaps more significant was the 1474 trial, by a tribunal made up of representatives of the Hanseatic cities, of Peter of Hagenbach for

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[52] Q. Wright, *A Study of War* 81 (1965).
[53] For a satirical comment on the appearance of these warriors, see Erasmus, *Bellum* (1515)-Imprint Soc. ed. 1972, 17).
[54] P. Be11i, *De Re Militari et Belli Tractatus*, Paris III, Cap. III (1563), Camegie tr. 1936,29, citing the *Corpus Juris Canonici* of 1500. See also The A*lexiad of Anna Connena*, tr. Sewter, 316-7 (1969): "The crossbow is a weapon of the barbarians. ..a truly diabolical machine."
[55] Treece and Oakeshott, *Fighting Men-How Men Have Fought Through the Ages* 207-8 (1963).
[56] *Op. cit*., 29.
[57] See, e.g., M. Keen, Chivalry, 1984; see also Gardot, "Le droit de la Glierre dans l'Oeuvre des Capitaines Francais du XVI Siecle," 72 Hague Recueil 397, 416 (1948).
[58] *See*, e.g., M.Keen, the Laws o.f War in the Late Middle Ages, 27 (1965); *see also* P. Contamine, *War in the Middle Ages*, Eng. tr. (1984),270-7; *and generally*, R. Ward, 2 *The Foundation and History of the Law of Nations in Europe*, ch. XIV (1795)-"Of the Influence of Chivalry."
[59] Keen, *op. cit*., 34.
[60] *Id*., I.
[61] *Henry V*, Act 4, Scene 7, II.5-10. See generally T. Meron, *Henry's Wars and Shakespeare's Laws*, 1993.
[62] Literally "skinner," armed bands of free companies-Keen, Laws, 192; *see also* 97-100.

administering occupied territory in a manner "contrary to the laws of God and of man." His plea that he had been carrying out the orders of his lord was rejected and he was executed.[63]

The rules of chivalry did not apply to the ordinary foot soldier, whose conduct was regulated by national military codes that gave commanders the "rights of justice" over miscreants. Thus the 1385 code of Richard II of England[64] forbade pillage of the church, victuals, provisions or forage; and, among other things, provided for parole by prisoners, who were to be considered property, not of their captors, but of the king. By the fifteenth century, when nearly all men-at-arms were included in official musters, subject to disciplinary codes of this kind, enforcement of the law became easier.

By the seventeenth century, most European countries had such codes[65] forbidding violence against women, marauding of the countryside, individual acts against the enemy unless authorized by a superior, private taking or keeping of booty, or the private detention of any prisoner. Of these codes it has been said that, together with the rules of international law, they constitute *"le meilleur frein pratique pour imposer aux armees le respect d 'un modus legitimus de mener les guerres."*[66] As to the position of women, the French knights had been adamant in protecting the modesty of those found in surrendered cities, and Coligny made violence against them punishable by death.[67] By the beginning of the seventeenth century the honor of women was so well established that Gentili could state[68] that "to violate the honour of women will always be held to be unjust," and he quoted as evidence the view of Alexander, "I am not in the habit of warring with prisoners and women." This would suggest that the rape of women has from earliest times been considered a war crime. Moreover, in the Lieber Instructions for the Government of the Armies of the United States in the Field, 1863, which formed the basis of most subsequent military codes, when providing for protection of inhabitants in occupied territories, express provision is made for the protection of women,[69] and in 1974, the General Assembly Declaration on the Protection of Women and Children in Emergency and Armed Conflict, provided that "all forms of repression and inhuman treatment of women... committed by belligerents in the course of military operations or in occupied territories shall be considered criminal."[70] More recently, the 1977 Protocol I to the 1949 Geneva Conventions expressly states: "Women shall be the object of special respect and shall be protected in particular against rape, forced prostitution and any other form of indecent assault."[71] This series of provisions leads one to question the purpose of those feminists who now seek to have rape specifically declared a war crime, articularly since it has been charged as such in many of the indictments issued by the Ad Hoc Tribunal for the former Yugoslavia.

TREATMENT OF WOUNDED IN WAR

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[63] *See* G. Schwarzenberger, *2 International Law: The Law of Armed Conflict*, ch. 39 (1968).
[64] W Winthrop, *Military Law and Precedents*, App. II (1886).
[65] *See*, e.g., The English Laws and Ordinances ofWarre, 163, C. M. Clode, 1 *Military Forces of the Crown*, App. VI (1869).
[66] de Taube, "L'apport de Byzance au Developpement de droit international occidental;" 67 Hague Recueil 237 (1939).
[67] Gardot, *loc. cit.*, 452-3,469, citing Fourquevaux, *La Discipline Militaire* 1592.
[68] *De Jure Belli*, Lib, II, cap. xxi (1612), Carnegie tr. 275,251 (1933).
[69] Schindler & Toman, *op. cit*., 3, Art. 37.
[70] Res. 3318 (XXIX), *id*., 295, Art. 5.
[71] *Id*., 1391, Art.76.

In earlier days combatants were not over-concerned with the fate of the wounded, particularly those belonging to an enemy, and this was especially so during the religious campaigns of the crusades. Nevertheless, by the twelfth century the knights of the Order of St. John had established a hospital in Jerusalem for the care of the sick and injured, and by the sixteenth century had established themselves as the Sovereign Order of Malta with the same purpose in mind. About the same time, writers were beginning to assert that doctors, who were often in clerical orders, enjoyed a special immunity. In the early part of the fourteenth century Bartolus maintained that they were free from seizure, and *Belli*[72] used this as a basis for stating that, during war, the "persons of doctors may not be seized, and they must not be haled to court or otherwise harassed. ..," and by the time of Louis XIV attention was directed to providing for the care of the wounded. By a 1708 decree[73] a permanent medical service was established a "la suite des armees et dans les places de guerre," and during the siege of Metz, 1552-3, Francois de Guise summoned the French surgeon Ambroise Para" to succour the abandoned wounded soldiers of the enemy and to make arrangements for their transport back to their army"[74]-a practice not embodied into treaty law until three centuries later.[75]

During later conflicts a variety of reciprocal arrangements were made for the care of the wounded, of which only one or two need be mentioned:

> "[The] convention made in 1743, between Lord Stair on behalf of the Pragmatic army and the Marshal Noailles for the French during the Dettingen campaign bound both sides to treat hospitals and wounded with consideration. Noailles, when he felt that his operations might cause alarm to the inmates of the hospitals at Techenheim, went so far as to send word that they should rest tranquil as they would not be disturbed. A fuller and more highly developed type of agreement was signed at L'Ecluse in 1759 by the Marshal de Baril, who commanded the French, and Major-General Conway, the British general officer commanding. The hospital staff, chaplains, doctors, surgeons and apothecaries were not. ..to be taken prisoners; and if they should happen to be apprehended within the lines of the enemy, they were to be sent back immediately. The wounded of the enemy who should fall into the hands of their opponents were to be cared for, and their food and medicine should in due course be paid for. They were not to be made prisoner and might stay in hospital safely under guard. ...Peyrilhe in 1780 proposed international recognition of the principle that the wounded should not be made prisoners of war and should not enter into the balance of exchanges."[76]

It was not, however, until after Dunant's *Souvenir of Solferino*, 1862, that this form of *ad hoc* arrangement received permanency and international recognition by way of the establishment of the International Committee of the Red Cross.[77]

The Middle Ages saw other customs developing that have ceased to be of topical importance, although in some instances they have been responsible for current practices. During the Hundred Years War it was possible to distinguish between *guerre mortelle*, war to the death,

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[72] *op. cit*., Pars. VII, cap.III, 34 (tr.187).
[73] Butler and Maccoby, *The Development of International Law* 134 (1928).
[74] *Id*., 187, n. 28.
[75] 1864, Geneva Convention for the Amelioration of the Condition of the Wounded in Armies in the Field, Schindler & Toman, op. cit., 285.
[76] Butler & Maccoby, *op. cit:*, 149-51.
[77] For a general discussion of "War Law and the Medical Profession," see Green, Essays, ch. VI.

bellum hostile, a war between Christian princes in which prisoners could ransom themselves, *guerre guerriable*, fought in accordance with the feudal rules of chivalry, and the truce, which indicated a temporary cessation of hostilities when the wounded and dead might be collected, with any resumption of actual fighting considered a continuation of an ongoing conflict rather than commencement of a new one-an attitude that applies at present in relations between Israel and those of her Arab neighbors with whom no peace treaty has yet been signed. Each had its own rules, but they were rules of honor rather than of law or humanitarianism. Unless it was a conflict in which no quarter was to be given, and this was indicated by raising a red pennant,[78] prisoners and others enjoying immunity, such as heralds, carried a white wand or even a white paper in their head-dress (the origin of the white flag?) and were frequently allowed freedom of movement under safe-conducts, or might be employed as messengers between the contending forces.[79]

CLASSICAL VIEW OF WAR

In order to appreciate the reasons for and nature of the law of war, it is not enough just to look to the practices of the Middle Ages. Reference must also be made to the writings of the classical writers on international law, for to the extent that these were consistent or expressed commonly held views prevalent at the time, their writings constitute evidence of customary law. Thus, in almost modern words, Gentili wrote that,[80] "in war. ..victory is sought in no prescribed fashion. ...Our only precaution must be not to allow every kind of craft and every kind of cunning device; for evil is not lawful, but an enemy should be dealt with according to law. ...In dealing with a just and lawful enemy we have the whole fetial law and many other laws in common. ...Necessity does not oblige us to violate the rights of our adversaries. ..[but] the laws of war are not observed toward one who does not observe them." This latter statement is, of course, not valid today, at least in so far as the Geneva principles are concerned.

Grotius, commonly, though wrongly, described as "the father of international law, is somewhat self-contradictory. First, he states[81] that "by the Law of Nations any Thing done against an Enemy is lawful. ..It is lawful for an Enemy to hurt another both in Person and Goods. ..[and for] both sides to do so without Distinction." However, later, when discussing Moderation concerning the Right of Killing Men in a Just War[82] he states that "there are certain Duties to be observed even toward those who have wronged us," and calls for avoidance of useless fighting, which is "wholly repugnant to the Duty of a Christian, and Humanity itself. Therefore all Magistrates ought strictly to forbid these things, for they must render an account for the unnecessary shedding of Blood to him, whose Viceregents they are."[83]

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[78] See generally, on these distinctions and practices, Stacey, "The Age of Chivalry," in M. Howard, *The Laws of War* 27, 32-8 (1994).
[79] Gentili, *op. Cit.*, Lib.II, ch. XVII, XVIII, tng. Tr., 216-40
[80] *Id*., Lib. II, ch. III, VI, XXIII, Eng. tr. 142-4, 159,272.
[81] *De Jure Belli ac Pacis*, Lib. III, cap. IV; ss. xviii, ix, x (1625), Eng. tr. 1738 (used here) 570,564,565, Carnegie tr. 654,648,649.
[82] Ch. XI.
[83] *Id*., s. xix (tr. 649; 743).

Having pointed out that the man in the field is forbidden from acting as if the conflict were a private affair and so may not keep captured property for himself, nor commit warlike acts after a retreat or an armistice,[84] he continues:

> "It is not enough that we do nothing against the Rules of rigorous Justice, properly so called; we must also take Care that we offend not against charity, especially Christian Charity. Now this may happen sometimes; when, for Instance, it appears that such a plundering doth not so much hurt the [enemy] State, or the King, or those who are culpable themselves, but rather the Innocent, whom it may render so extremely miserable. ...But farther, if the taking of this Booty neither contributes to the finishing of the War, nor considerably weaken the Enemy, the Gain arising to himself only from the Unhappiness of the Times, would be highly unbecoming an honest Man, much more a Christian. ...Yet if a Soldier, or any other Person, even in a just War, shall bum the Enemy's House, without any Command, and besides when there is no Necessity, or just Cause, in the Opinion of the Divines he stands obliged to make Satisfaction for those Damages. I have with Reason added, , .if there be not a just Cause, for if there be, he may perhaps be answerable to his own State, whose orders he hath transgressed, but not to his Enemy, to whom he hath done no wrong."[85]

Seeking a view that largely reflects what states actually did, we might cite the views ofVattel:[86] Since the object of a just war is to overcome injustice and violence, and to use force upon one who is deaf to the voice of reason, a sovereign has the right to do to his enemy whatever is necessary to weaken him and disable him from maintaining his unjust position; and the sovereign may choose. the most efficacious and appropriate means to accomplish that object, provided those means be not essentially unlawful, and consequently forbidden by the Law of Nations. *A lawful end confers a right only to those means which are necessary to attain that end. Whatever is done in excess of such measures is contrary to the natural law, and must be condemned as evil* before the tribunal of conscience. ...[A]s it is very difficult sometimes to form a just estimate of what the actual situation demands, and, moreover, as it is for each Nation to determine what its particular circumstances warrant its doing, it becomes *absolutely necessary' that Nations should mutually conform to certain general roles on this subject.* Thus, when it is clear and well recognized that such a measure, such an act of hostility, is, in general, necessary for overcoming the resistance. of the enemy and attaining the object of lawful war, the measure, viewed thus in the abstract, is regarded by the Law of Nations as lawful and proper in war, although the *belligerent who would make use of it without necessity, when less severe measures would have answered his purpose, could not be guiltless* before God and his conscience*, This is what constitutes the difference between what is just, propel; and irreprehensible in war and what is merely permissible and may be done by Nations with impunity.*

Gentili, too, wrote of restraints in war-it is "only when we cannot overcome their resistance and bring them to terms by less severe means, that we are justified in taking away [the] lives" of the enemy.[87] Equally condemned were denial of quarter, reprisals against prisoners,[88]

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[84] *Id*., 684-5; 788-9. *See also, Grumpelt {Scuttled U-boats) Trial* (1946) 13 I.L.R. 309.
[85] *Id*.. ss. iv, v (686; 790-1).
[86] Vattel, Le Droit des Gens, 1798, Liv. Ill, c. VIII, ss. 138, 137 (Camegie tr., 280,279) (italics added). See also Ruddy, *International Law in the Enlightenment*, 1975, 245-56.
[87] *Op. cit*., s. 39 (p. 280).
[88] Not until the Prisoners of War Convention, 1929, Art. 2 (Schindler and Toman, *op. cit.*"339) was this principle embodied in treaty law.

violence against women, children, the aged and the sick, ecclesiastics, men of letters, husbandmen and generally all unarmed persons; while assassination, the use of poison and poisoned weapons, as well as the poisoning of wells, streams and springs were also beyond the pale.[89] Of all classical writers, Vattel was the most concerned in seeking to 'limit war's horrors :[90]

> Necessity alone justifies Nations in going to war; and they should *all refrain from, and as a matter of duty oppose, whatever tends to render war more disastrous. ...All acts of hostility which injure the enemy without necessity*, or which do not tend to procure victory, *are unjustifiable and as such condemned by the natural law*. ...As between Nation and Nation, we' must lay down general rules, independent of circumstances and of certain and easy application. Now, we can only arrive at such rules by considering acts of hostility in the abstract and in their essential character. Hence, ...*the voluntary Law of Nations limits itself to forbidding acts that are essentially unlawful and obnoxious, such as poisoning, assassination, treason, the massacre of an enemy who has surrendered and from whom there is nothing to fear. ..[and] condemns every act of hostility which. ..contributes nothing to the success of our arms, and neither increases our strength nor weakens the enemy*. On the other hand, it permits or tolerates every act which in its essential nature is adapted to attaining the end of the war and it does not stop to consider whether the act was unnecessary, useless or superfluous in a given case unless there is the clearest evidence that an *exception should have been made in that instance,. for where the evidence is clear freedom of judgment cannot be exercised*. Thus it is not, generally speaking, contrary to the laws of war to plunder and lay waste a country. But if an enemy of greatly superior forces should treat in this manner a town or province which he might easily hold possession of as a means of obtaining just and advantageous terms of peace, *he would be universally accused of waging war in a barbarous and uncontrolled manner*. The deliberate destruction of public monuments, temples, tombs, statues, pictures, etc., is, therefore, absolutely condemned. .., as being under no circumstances conducive to the lawful object of war. The pillage and destruction of towns, the devastation of the open country by fire and sword, are a (its no less to be abhorred and condemned when they are committed without evident necessity or urgent reasons.

It is of interest to note that it was not until the adoption of Protocol I, 1977,[91] that impedimenta of the world's cultural heritage[92] or for the preservation of objects indispensable to the survival of the civilian population, such as foodstuffs, agricultural areas, crops, drinking-water installations and the like came under treaty protection.

CODIFICATION OF RULES OF WAR

The American Civil War produced the first modern codification of regulations for use during conflict with the promulgation by President Lincoln of *the Instructions for the Government of Armies of the United States in the Field*,[93] which had been prepared by Professor Francis

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[89] *Op. cit*., ss. 140,142,45-7, 155-7 (pp. 280-3,287,289).

[90] *Op. cit*., Liv. III, c. VIII, s. 156, ch. IX, ss. 172-3 (pp. 289, 294-5) (emphasis added).

[91] Schindler & Toman, *op. cit*., 621

[92] In 1954 a Convention for the Protection of Cultural Property in the Event of Armed Conflict was adopted, *id*., 745.

[93] General Orders No.100, 24 Apr. 1863, Schindler and Toman, *op. cit*., 3; *see also* Baxter, "The First Modern Codification of the Law of War," 3 Int'l Rev. Red X 171 (1963).

Lieber of Columbia. Lieber's motivation in preparing this draft may be seen from his Political Ethics:[94] *"War by no means absolves us from all obligations toward the enemy.* ...They result in part from the object of war, in part from the fact that the belligerents are human beings, that *the declaration of war is, among civilized nations, always made upon tacit acknowledgment of certain uses and obligations. ...*

In accordance with the Code,[95] of suffering or for revenge:

> [T]he unarmed person is to be spared in person, property, and honor as much as the exigencies of war will admit. ..protection of the inoffensive citizen of the hostile country is the rule. ...The United States acknowledge and protect, in hostile country occupied by them, religion and morality; strictly private property; the persons of the inhabitants, especially those of women; and the sacredness of domestic relations. Offenses in the country shall be rigorously punished. ...All wanton violence committed against persons in the invaded country. ..all robbery. ..or sacking, even after taking a place by main force, all rape, wounding, maiming or killing of such inhabitants, are prohibited under the penalty of death. ...Crimes punishable by all penal codes, such as arson, murder, assaults, highway robbery, theft, burglary, fraud, forgery and rape, if committed by an American soldier in a hostile country against its inhabitants, are not only punishable as at home, but in all cases in which death is not inflicted, the severer punishment shall be preferred.

The Code also recognized that prisoners were to be protected and tha1: it was for-bidden to deny quarter. Further, the rights of chaplains and medical personnel were confirmed, as was the ban on any discrimination in the treatment of enemy personnel. It also forbade the use of enemy colors, which would now be considered as perfidy. While aimed at the conduct of American forces, the Code went further, acknowledging the right to punish what would today be described as war Crimes: "[a] prisoner of war remains answerable for his crimes committed against the captor's army or people, committed before he was captured, and for which he has not been punished by his own authorities."[96] Dealing with the problem of members of a force of an enemy state considered to be engaged in an "unjust" war,

> [t]*he law of nations ...admits of no rules or laws different from those of regular warfare*, regarding the treatment of prisoners of war, although they may belong to the army of a government which the captor may consider as a wanton and unjust assailant.[97] Modern wars are not internecine wars, in which the killing of the enemy is the object.[98] The destruction of the enemy in a modern war, and, indeed, modern war itself, are means to obtain the object of the belligerent which lies beyond the war. *Unnecessary or revengeful destruction of life is not lawful*.[99]

The rules enunciated in the Lieber Code were so consistent with current military practice that similar codes or manuals were soon issued by Prussia, The Netherlands, France, Russia,

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[94] 1838,657.
[95] Arts. 16,2,37,44,47.
[96] Art. 59.
[97] See, e.g., Lauterpacht, "Rules of Warfare in an Unlawful War," in Lipsky, *ed., Law and Politics in the International Community*, 89 (1953).
[98] Modern civil wars, such as those in Bosnia or Rwanda, would appear to give the lie this assertion.
[99] Arts. 67, 68 (italics added).

Serbia, Argentina, Great Britain and Spain.[100] But there was no internationally agreed document setting out the rules and principles adopted by these various nations. To the extent that they and the writings of ackt1owledged international law authorities express agreement, however, they may be regarded as *opinio juris ac necessitatis*, thus constituting the customary law of armed conflict. Since they have not been overruled by treaty or expressly rejected by a state, especially a significant military power, they are as obligatory as any other rules of internationallaw**.**[101]

International efforts aimed at controlling activities in conflict had already begun in the middle of the nineteenth century. The Declaration of Paris, 1856,[102] was concerned with some selected aspects of maritime warfare, but more significant was the 1864 Geneva Convention for the amelioration of the wounded in armies in the field,[103] adopted only one year after the establishment of the International Committee of the Red Cross, recognizing the immunity of the symbol and those wearing it. This Convention initiated a series of Geneva Conventions (1906, 1929 and 1949), culminating in the Protocols of 1977. This body of law, directed at the treatment and protection of persons *hors de combat*-the wounded on land or at sea, prisoners of war, civilians and other noncombatants-is known as the Geneva Law or international humanitarian law.

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[100] Holland, *The Laws of War on Land*, 72-3 (1908).
[101] *See, e.g.*, D' Amato, *The Concept of Custom in International Law*, 1971; Akehurst, "The Hierarchy of the Sources of International Law," 47 Brit. Y.B. Int'l L., 273 (1974-:5); Villiger, *Customary International Law and Treaties*, esp. Part III (1985).
[102] Schindler & Toman, *op. cit.*, 787.
[103] *Id.*,270.

WHAT IS-WHY IS THERE THE LAW OF WAR

Continued……

Contents

METHODS OF WARFARE

As to the methods of warfare, the first international effort at control was the 1868 Declaration of St. Petersburg[1] directed against the use of lightweight explosive bullets,[2] and it is worth noting the motive for this ban as expressed in the Preamble to the Declaration:

> having by common agreement fixed the technical limits at which the necessities of war ought to yield to the requirements of humanity. ..[the parties] declare. ..That the progress of civilization should have the eject of alleviating as much as possible the calamities of war; That the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy; That for thi~ purpose it is; sufficient to disable the greatest possible number of men; That this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable; That the employment of such arms would, therefore, be contrary to the laws of humanity.

With these lofty motives in mind, the parties banned their use on a reciprocal basis. In fact, only nineteen European states adhered to the Declaration.

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[1] *Id*.,101.

[2] The most infamous of these bullets is the "dumdum" invented by Great Britain at Dum-Dum, India. It was generally assumed that ordinary bullets, though they might kill, were not effective in stopping "the onrush of a hardy and fanatical savage," and in 1903 Holland (*let-ter to The Times*, 2 May), maintained that their use was not unlawful so far as the United Kingdom and United States were concerned (*Letters on War and Neutrality* 53, 1909), "it having been found in the British frontier wars that the impact of an ordinary bullet did not give shock sufficient to stop the onrush of certain assailants, so that the suffering caused to such assailants by their expansion in the body was not useless, and did not bring them within the condemnation of explosive bullets by the Declaration of St. Petersburg," Westlake, *International Law, Part II*, War, 78 (1913). The U.K. "withdrew Dum-Dum bullets during the South African War, and it is to be taken for granted that Great Britain will not in future make use of them in a war with civilized Powers," Oppenheim, *International Law,* Vol. 2, Ist *ed*., 1906, s.112, leaving open whether he considered their use against "uncivilized" powers law- ful. Now that many police forces are permitted to use explosive (hollow-nose) bullets against their own nationals and, since it is often argued that they are less destructive than ordinary rounds, the ban may fall into desuetude, especially as other explosive weapons, like grenades, are still permitted, although antipersonnel mines will be banned for those accepting the Ottawa Treaty (1997), reprinted in 36 ILM 1507.

Even fewer states attended the 1874 Brussels Conference that drew up a Project of an International Declaration Concerning the Laws and Customs of War.[3] This postulated principles concerning the administration of occupied territory, the distinction between combatants and noncombatants, the conduct of sieges and bombardments, and the treatment of spies, prisoners of war and the sick and wounded. Although the Project never came into force, we should not overlook its reiteration of the preambular terms of St. Petersburg .and its even more significant sta1ement that, revising the laws and general usages of war, whether with the object of defining them with greater precision, or with the view of laying down, by a common agreement, certain limits which will restrain, as far as possible, the severities of war. *War being thus regulated would involve less suffering, would be less liable to those aggravations produced by uncertainty, unforeseen events, and the passions excited by the struggle; it would tend more surely to that which should be its final objective, viz., the re-establishment of good relations, and a more solid and lasting peace between the belligerent States.*

The Project embodied a principle iterated in every treaty since. By Article 12,

the laws of war do not recognize in belligerents an unlimited power in the adoption of means of injuring the enemy. ..[and, Article 13, a]ccording to this principle are especially forbidden:[4]

(a) Employment of poison or poisoned weapons;
(b) Murder by treachery of individuals belonging to the hostile nation or army;
(c) Murder of an enemy who, having laid down his arms or having no longer means of defence, has surrendered at discretion;
(d) The declaration that no quarter will be given;
(e) The employment of arms, projectiles or missiles calculated to c:ause unnecessary suffering [now understood objectively, as relating to what is necessary for the achieving of an operation, rather than subjectively, as measured by the individual on whom the suffering has been inflicted[5]], as well as the use of projectiles prohibited by the Declaration of St. Petersburg of 1868;
(f) Making improper use of a flag of truce, of the national flag or of the military insignia and uniform of the enemy, as well as the distinctive badges of the Geneva Convention;
(g) Any destruction or seizure of the enemy's property that is not imperatively demanded by the necessity of war.

Largely building upon the Brussels Project, the Institute of International Law at its 1880 meeting drew up its Oxford Manual on the Laws of War.[6] Once again, what is of major significance to the law of war is contained in the Preface:

War holds a great place in history, and it is not to be supposed that men will soon give it up-in spite of the protests which it arouses and the horror which it inspires-because it

[3] Schindler & Toman, *op. cit.,* 25 (italics added).
[4] Italics in original.
[5] *See*, *e.g*., Bothe, Partsch and Solf. *New. Rules for Victims of Armed Conflicts*, 195 (1982): "The Principle of humanity complements the principle of necessity by forbidding those measures of violence which are not necessary (i.e., relevant and proportionate) to the achievement of a definite military objective."
[6] Schindler & Toman, *op. cit*., 35 (italics added).

> appears to be the only possible issue of disputes which threaten the existence of States, their liberty, their vital interests. But the gradual improvement in customs should be reflected in the method of conducting war. It is worthy of civilized nations "to restrain the destructive force of war, while recognizing its inevitable necessities." The problem is not easy of solution; however, some points have already been solved, and very recently the draft Declaration of Brussels has been a solemn pronouncement of good intentions of governments in this connection. It may be said that independently of the international laws existing on this subject, there are *today certain principles of justice which guide the public conscience, which are manifested even by general customs, but which it would be well to fix and make obligatory* … The Institute does not propose an international treaty, which it might perhaps be premature or at least very difficult to obtain; but it believes it is fulfilling a duty in offering to the governments a *Manual suitable as the basis for national legislation in each State, and in accord with the progress of juridical science and the needs of civilized armies*. Rash and extreme rules will not be found therein. The Institute has not sought innovations in drawing up the *Manual*; it has contented itself with *stating clearly and codifying the accepted ideas of our age so far as this has appeared allowable and practicable*. By so doing, it believes it is rendering service to military men themselves. In fact so long as the demands of opinion remain indeterminate, belligerents are exposed to painful uncertainty and to endless accusations, A positive set of rules ... if they are judicious, serves the interests of belligerents and is far fi-om hindering them, since by preventing the unchaining of passions and savage instincts-which battle always awakens, as much as it awakens courage and manly virtue-it strengthens the discipline which is the strength of armies,. it also ennobles their patriotic mission in the eyes of the soldiers by keeping them within the limits of respect due to the rights of humanity'. But in order to attain this end it is not sufficient for sovereigns to promulgate new laws. It is essential, too, that they make these laws known to all people, so that when a war is declared, the men called to take up arms to d~fend the causes of the belligerent States, may be thoroughly impregnated with the special rights and duties attached to the e-xecution of such a command. ...

Only a few of the Manual's provisions need be mentioned,[7] since they have been embodied, in almost identical wording, in the relevant treaties beginning with the Hague Conference of 1899:

> The state of war does not admit of acts of violence, save between the armed forces of belligerent States. ...*Every belligerent armed force is bound to conform to the laws of war: The laws of war do not recognize in belligerents an unlimited liberty as to the means of injuring the enemy. They are to abstain especially .from all needless severity.* ...No invaded territory is regarded as conquered until the end of the war; until that time the occupant exercises. ..only *de facto* power, essentially provisional in character. ...*It is forbidden* to maltreat inoffensive populations ...or employ arms, projectiles, or materials of any kind calculated *to cause superfluous suffering or to aggravate wounds*. ..[or] to injure or kill an enemy who has surrendered at discretion or is disabled, and to declare in advance that quarter will not be given, even by those who do not ask it for themselves.[8] Wounded and sick soldiers should be brought in and cared for, to

[7] Arts. 1,3,4,6,7,9,10,19,32,33,35,44,47,49, 61-3,68,70 (emphasis added).

[8] Such a rule would have been impornant for the Imperial Japanese Army, whose' members regarded surrender or capture as the act of a coward not entitled to treatment as an honorable soldier.

whatever nation they belong. ...It is forbidden to rob or mutilate the dead lying on the field of battle. ...It is forbidden to attack and to bombard undefended places. The commander of an attacking force, save in cases of open assault, shall, before undertaking a bombardment, make every due effort to give notice thereof to the local authorities. ...[9] Ambulances and hospitals for the use of armies are recognized as neutral and should, as such, be protected and respected by belligerents, *so long as any sick or wounded are therein. ...*[10] The occupant [of enemy territory] should maintain the laws which were in force in the country in time of peace, and should not modify, suspend, or replace them, unless necessary [this proviso would permit amendment if the said laws ran counter to the occupant's concept of moral conduct, so long as that was in conformity with accepted concepts of justice]. ...The population of the invaded district cannot be compelled to swear allegiance to the hostile Power. ...Family honour and rights, the lives of individuals, as well as their religious convictions and practice, must be respected [again ,this would not oblige an occupant to recognize practices repulsive to its own way of life.] ...Prisoners of war are in the power of the hostile government, but not in that of the individuals or corps who captured them. They are subject to the laws and regulations in force in the army of the enemy. They must be humanely treated. ... Arms may be used, after summoning, against a prisoner attempting to escape. ...Prisoners cannot be compelled in any manner to take any part whatever in the operation of war,[11] nor compelled to give information about their country or their army. *Offenders against the laws of war are liable to the punishment specified in the penal law* [which would be the national law, no provision for trial by any international tribunal having been made; nor was any obligation imposed requiring a national force to hand an accused offender to the enemy so that he could be tried by an enemy tribunal].

Perhaps at this point it is in order to comment on the view as to the law of war of one or two of the major players in international armed conflict. According to Great Britain:[12]

BELLIGERENTS AND NEUTRAL PARTIES

The laws of war are the rules which govern the conduct of war-rules with which according to international law, belligerents and neutrals are bound to comply. *They are binding not only upon States as such but also upon their nationals and, in particular; upon the individual members of the Armed forces.* In antiquity, and in the earlier part of the Middle Ages, no rules of warfare existed.[13] During the latter part of the Middle Ages, however, the influence of Christianity as well as that of chivalry made itself felt, and gradually the practice of warfare became less savage. The present laws of war are the result of a slow growth. Isolated milder practices became in the course of time

[9] In fact, prior to the use- of the atomic bombs in 1945, radio messages were broadcast to the Japanese authorities naming a number of cities likely to be heavily bombed and advising evacuation of the civilian populations.

[10] Does this mean that an unoccupied hospital though marked with a red cross, is not protected? The Manual makes no reference to the status of civilian hospitals in a city subject to bombardment.

[11] Thus, the pressure methods used against members of the British Indian Army by the Japanese in WW II to compel them to join the Indian National Army were clearly contrary to the law of war. See Green. "The Indian National Anny Trials," II Modern L.R. 47 (1948) and "The Problems of a Wartime International Lawyer." 2 Pace Y .B. Int'l Law 93 (1989).

[12] H.M.S.O., The Law of War on Land. Part III of the Manual of Military Law 1-3 (1958).

[13] As has been seen, however, this is not completely correct, even though there may have been no written rules generally accepted.

> usages, which at first were not accompanied by a sense of legal obligation, but which by custom (i.e., constant practice accepted as law) and by treaties, gradually developed into legal rules. ...The laws of war consist, therefore, partly of customary rules which have grown up in practice, and partly of written rules that is to say. rules which have been expressly agreed upon by governments in international treaties and conventions. ...The development of the law of war has been determined by three principles: first. the principle that a belligerent is justified in applying compulsion and force of any kind, to the extent necessary for the realisation of the purpose of war, that is, the complete submission of the enemy at the earliest possible moment with the least possible expenditure of men, resources and money: secondly, the principle of humanity. according to which kinds and degrees of violence which are not necessary for the purpose of war are not permitted to a belligerent: and thirdly, the principle of chivalry', which demands a certain amount of fairness in offence and defence, and a certain mutual respect between the opposing forces. The law of war is inspired by the desire of all civilised nations to reduce the evils of war by: (a) protecting both combatants and non-combatants from unnecessary suffering; (b) safeguarding certain fundamental human rights of persons who fall into the hands of the enemy, particularly prisoners of war, the wounded and sick, and civilians; and (c) facilitating the restoration of peace.

Although the United States manual on *The Law of Land Warfare*[14] is almost ..identical in its wording, it stresses a point not included in the British statement of underlying general principles-"The prohibitory effect of the law of war is not minimized by 'military necessity' which has been defined as the principle which .justifies those measures not forbidden by international law which are indispensable for securing the complete submission of the enemy as soon as possible. Military necessity has been generally rejected as a defense for acts forbidden by the customary and conventional laws of war inasmuch as the latter have been developed and framed with consideration for the concept of military necessity."[15]

Since both manuals refer to the importance of customary as well as conventional law, it is useful to cite the comments in the United States text on the sources of the law of war: "The law of war is derived from two principal sources: (a) *Law making Treaties* (or Conventions), such as the Hague and Geneva Conventions. (b) *Custom*. Although some of the law of war has not been incorporated in any treaty or convention to which the United States is a party, this body of unwritten or customary law' is firmly established by the custom of nations and well defined by recognized authorities on international law. Lawmaking treaties may be compared with legislative enactments in the national law of the United States and the customary law of war with the unwritten Anglo-American common law."[16]

Despite this statement it is not always easy to determine what a particular state recognizes as customary law'. This may be seen if we refer to the U.S. attitude to the use of poison gas. As already indicated, poison of any kind was regarded as illegal from earliest times and particularly in the writings of Grotius, the “father” of international law. Moreover, poison gas was forbidden by the Geneva Protocol of 1925**.**[17] to which by the outbreak of WW II there were 40 parties. With the United States and Japan as the only major powers not ratifying or

[14] Dept. of the Army, FM27-10, 1956. *See. however*, paras. 137,630.633.
[15] In practice, most states ensure that their military advisers are apprised of any proposals that may be suggested for inclusion in a treaty concerning armed conflict. Many delegations to such conferences include representatives of the armed forces.
[16] 4
[17] 94 LNTS 65; Schindler & Toman, *op. cit*., 11

acceding. Paragraph 38 of the United States manual states: "The United States is not a party to any treaty now in force, that prohibits or restricts the use in warfare of toxic or noxious gases, of smoke or incendiary materials, or of bacteriological warfare. ...The Geneva Protocol for the prohibition of the use in war of asphyxiating, poisonous. or other gases. and of bacteriological methods of warfare, ...has been ratified or adhered to by and is now effective between a considerable number of States. *However the United States Senate has refrained from giving its advice and consent to the ratification by the United States, and it is accordingly not binding upon this Country."* On the other hand, the United States Naval War College was of opinion that the "use of poisonous gases and those that cause unnecessary suffering is in general prohibited,"[18] and in 1943, during World War II, President Roosevelt condemned[19] reports "that the Axis powers are making significant preparations indicative of [an] intention ...to loose upon mankind such terrible and inhumane weapons. *...Use of such weapons has been outlawed by the general opinion of civilized mankind.* This country has not used them, and I hope that we will never 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." Despite the apparent incompatibilities, the United States acceded to the Protocol in 1975 and the Field Manual was amended.[20] The amendment includes the introductory comment, "Whereas the use in war of asphyxiating, poisonous or other gases. and of all analogous liquids. materials or devices, has been justly condemned by the general opinion of the civilised world"-words which had already appeared in the text of the Protocol and repeated by the President in 1943! It would appear, however. that the official view of the Department of the Army is that gas is forbidden by conventional and not by customary law
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While it is true that the manuals and principles therein here referred to are concerned with land warfare, the principles enunciated are of general application and equally significant as principles underlying air and maritime warfare.

By way of contrast, and reflecting the views of Clausewitz, [21] reference might be made to the Introduction of the *German War Book*: [22]

> [T]he "argument of war" permits every belligerent State to have recourse to all means which enable it to attain the object of the war: still, practice has taught the advisability of allowing in one's own interest the introduction of a limitation in the use of certain methods of war and a total renunciation of the use of others. Chivalrous feelings. Christian thought. higher civilization and, by no means least of all. the recognition of one's own advantage, have led to a voluntary and self-imposed limitation, the necessity of which is today tacitly recognized by all States and their armies. They have led in the course of time, in the simple transmission of knightly usage in the passages of arms, to a series of agreements, hallowed by tradition and we are accustomed to sum these up in the words "usage of war" (*Kriegsbrauch*), "custom of war" (*Kriegssitte*) , or "fashion of war" (*Kriegsmanier*) . Customs of this kind have always existed, even in the times of antiquity; they differed according to the civilization of the different nations and their public economy, they were not always identical, even in one and the same conflict, and they have in the course of time often

[18] International Law Situations, I935, 106, *See also* 102. *See also* Hyde. 3 *International Law Chiefly* as Interpreted and Applied by the United States. 1820 (1947).
[19] *Dept. of State Bull*., 12 Jun, 1943. Vol 1. VIII, No.207 .
[20] 15 July 1976, HQ Dep't of the Army FM2-10, C-1
[21] *Supra* note I.
[22] Eng. tr., J. H. Morgan, 1915,52-4.

> changed; they are, older than any scientific law of war, they have come down to us unwritten, and moreover they maintain themselves in full vitality; they have, therefore, won an assured position in standing armies according as these latter have been introduced into the systems of almost every European State. The fact that such limitations of the unrestricted and reckless application of all the available means for the conduct of war, and thereby the humanization of the customary methods of pursuing war, really exist, and are actually observed by the armies of all civilized States, has in the course of the nineteenth century often led to attempts to develop, to extend, and thus to make universally binding these pre-existing usages of war; to elevate them to the level of laws binding nations and armies, in other words to create a *codex belli*; a law of war. All these attempts have hitherto, with some few exceptions... completely failed. If, therefore, in the following work the expression "the law of war" is used, it must be understood that by it is meant not a *lex scripta* introduced by international agreements [although Germany had become a party to the Hague Conventions in 1909]; but only a reciprocit)' of mutual agreement; a limitation of arbitrary behaviour, which custom and conventionality, human friendliness and a calculating egotism have erected, but for the observance of which there exists no express sanction, but only "the fear of reprisals" decides. Consequently the usage of war is even now the only means of regulating the relations of belligerent States to one another. But with the idea of the usages of war will always be bound up the character of something transitory, inconstant, something dependent on factors outside the army. Nowadays it is not only the army which influences the spirit of the customs of war and assures recognition of its unwritten laws. Since the almost universal introduction of conscription, the peoples themselves exercise a profound effect upon this spirit. In the modem usages of war one can no longer regard merely the traditional inheritance of the ancient etiquette of the profession of arms, and the professional outlook accompanying it, but there is also the deposit of the currents of thought which agitate our time. But since the tendency of thought of the last century was dominated essentially by humanitarian considerations which not infrequently degenerated into sentimentality and flabby emotion there have not been wanting attempts to influence the development of the usages of war in a way which was in fundamental contradiction with the nature of war and its object. Attempts of this kind will also not be wanting in the future the more so as these agitations have found a kind of moral recognition in some provisions of the Geneva Convention and the Brussels and Hague Conferences. Moreover the officer is a child of his time. He is subject to the intellectual tendencies which influence his own nation; the more educated he is the more will this be the case, The danger that, in this way, he will arrive at false views of the essential character of war must not be lost sight of. The danger can only be met by a thorough study of war itself. By steeping himself in military history an officer will be able to guard himself against excessive humanitarian notions, it will teach him that certain severities are indispensable to war, nay more, that the only true humanity very often lies in a ruthless application of them.

The somewhat cynical and cavalier attitude to the law of war expounded here finds it application as recently as 1941 in the reply of Keitel[23] to the warning by Canaris that the German treatment of Soviet prisoners of war was contrary to international law: “The objections arise from the military concept of chivalrous warfare. This is the destruction of an ideology."

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[23] Nuremberg Judgmeent, 1946. H.M.S.O., Cmd. 6964, 91.

> Regardless of the German point of view in 1915, it is generally accepted that the binding law of war today finds its origins in the Geneva and Hague Conventions. The latter are the product of the Conferences of 1899 and 1907 called at the initiative of the Czar, and the principles established there underlie what is now known as the Law of The Hague. In 1899, in addition to the Declaration against soft-nosed explosive bullets mentioned previously, there was also a ban on the diffusion of asphyxiating or deleterious gases, as well as the first elementary effort to deal with aerial warfare by banning the launching of projectiles from balloons.[24] For the most part, these Declarations were regarded as temporary pending the calling of a third Hague Conference, which has never taken place. However, even though not all the powers have ratified or acceded thereto, the general! view is that they express rules of customary law. That this is so is demonstrated by the Judgment of the International Military Tribunal at Nuremberg with its comment [25]: Several of the belligerents in the recent! war were not parties to the [IVth] Convention....[B]y 1939 these rules, laid down in the Convention were recognized by all civilized nations. and were regarded as being declaratory of the laws and customs of war…. The argument in defence of the charge with regard to the murder and ill-treatment of Soviet prisoners of war. that the U.S.S.R. was not a party to the Geneva Convention. is quite without foundation. On the 15th September 1941 Admiral Canaris protested against the regulations for the treatment of Soviet prisoners of war …..He then stated "The Geneva Convention for the treatment of prisoners of war [to which the Soviet Union was not a party] is not binding in the relationship between Germany and the U.S.S.R., therefore only the principles of general international law on the treatment of prisoners of war apply. Since the 18th century these have gradually been established along the lines that war captivity is neither revenge nor punishment., but solely protective custody~, the only purpose of which is to prevent the prisoners of war from further participation in the war. This principle developed in accordance with the view held by all armies that it is contrary to military tradition to kill or injure helpless people. ...The decrees for the treatment of Soviet prisoners of war ii enclosed are based on a fundamentally different view-point." This protest which correctly stated the legal position, was ignored. ...

CONVENTION II OF 1899

It is now apt that we make some reference to Convention II of 1899 as amended as Convention IV in 1907.[26] Many of its basic principles, and especially the Preamble, are applicable *mutatis mutandis* in any theater of war:

> Seeing that, while seeking means to preserve peace and prevent armed conflict between nations, it is likewise necessary to bear in mind the cases where the appeal to arms has been brought about by events which their care was unable to avert; Animated by the desire to serve, even in this extreme case, *the interests of humanity and the ever progressive needs of civilization*; Thinking it important, with this object, to revise the general laws and customs of war, either with a view to defining them

[24] For a general discussion on the law concerning aerial warfare, *see* Green. *Essays on the Modern Law of War*, ch.VII (1985).
[25] *Op. cit*., with regard to the Hague. 65 (41 Am. J, lnt'l Law 177, 248-9), and as to Geneva, 48 (228-9).
[26] Schindler & Toman, *op. cit.*, 63 (emphasis added).

> with greater precision *or to confirming them, within such limits as would mitigate their severity as far as possible. ...[T]hese provisions, the wording of which has been inspired by the desire to diminish the evils of war* ***as far as military requirements permit****, are intended to serve* **as a general rule of conduct** *for the belligerents in their mutual relations and in their relations with the inhabitants*. It has not, however, been found possible at present to concert regulations covering all the circumstances which arise in practice. On the other hand, the High Contracting Parties clearly do not intend that unforseen cases should, in the absence of a written undertaking, be left to the arbitrary judgment of military commanders. *Until a more complete code of the laws of war has been issued, the High Contracting Parties deem it expedient to declare that, in cases not in the Regulations adopted by them* [and annexed to the Convention] ***the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established among civilized peoples, from the laws of humanity; and the dictates of the public conscience. ...***

The last sentence is known as the Martens Clause and is named after the Russian Foreign Minister who introduced it. Its purpose was to deal with any lacunae or unexpected situation that might arise and was intended to prevent the possibility of any belligerent contending that its actions were legitimate since they were not expressly forbidden by the Convention. Today, it is understood to apply to every armed conflict and tends to be embodied either directly or by way of paraphrase, in every treaty concerning the conduct of hostilities. Thus, Article 1, paragraph 2, of Protocol I, 1977, provides that, "[I]n cases not covered by the Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience." By embodying the principle in the actual body of the Protocol rather than, as had been the practice formerly, in the Preamble, the framers ensure that it had been elevated to become part of the mandatory law. It is unfortunate, however, that no attempt has been made to define what constitutes "the principles of humanity and the dictates of the public conscience." Presumably, it is assumed that these are so well known and so generally accepted as to render definition superfluous. Interestingly enough, in Protocol II, dealing with non-international conflicts the Martens Clause remains part of the Preamble and since this is the first treaty effort to deal with such conflicts, other than the short minibill of rights found in Article 3 common to the four 1949 Conventions, the reference to "established custom" has perhaps not unreasonably, been omitted.

In accordance with general treaty practice at the time, the Hague Conventions contain a "general participation " clause, the effect of which is to ensure that the Convention applies only during a conflict in which all the belligerents are parties to the Convention claimed to be applicable. This would mean that if any belligerent, however insignificant, even one only nominally a party to the conflict but not contributing any forces or materiel has not acceded to the Convention, it would not be applicable even though the “real” belligerents were all apparently bound thereby. This failing tended to give added significance to the Martens Clause with its reference to custom and the like. Moreover the “Real” belligerents in such circumstances have tended to apply the Convention as between themselves,[27] while to the

[27] *See*, e.g., the English prize case. The Mowe [1915], p. 1, and *The Blonde* [1922] A.C. 313. in each of which Convention VI (Status of Merchant Ships at Outbreak of Hostilities, Schindler & Toman, *op. cit*., 791) was applied though Serbia and Montenegro were not parties

extent that the Convention reproduces customary law[28] or is regarded as having hardened into such custom, as explained by the Nuremberg Tribunal,[29] the "general participation" clause has lost its significance and in fact, is no longer used. Instead as is made clear in the 1949 Conventions[30] the present law operates "in all circumstances ...[and a]lthough one of the Parties in conflict may not be a Party to the present Convention, the Powers who are parties thereto shall remain bound by it in their mutual relations…..[and] in relation to the said Power, if the latter accepts and applies the provisions thereof."

While the Hague and Geneva Conventions applied in both World Wars, it should be borne in mind that in none of them was any provision made for the trial of individual of fenders. The only reference to "liability" in the then-existing black-letter law was Article 3 of Hague Convention IV, which provided that "a belligerent party which violates the provisions of the regulations shall, if the case demand, be liable to pay compensation. It shall be responsible for all acts committed by persons forming part of its armed forces." Regardless of the fact that, unless it is clearly provided otherwise, only the states party to the treaty acquire enforceable rights thereunder,[31] it is on the basis of this provision that former prisoners of the Japanese are seeking to recover personal compensation,[32] even though the Peace Treaty with Japan[33] liquidated personal claims, thus invalidating any claim that might have been created under the 1907 Convention.

Although the Convention provides for state responsibility which in accordance with the normal rules of international law, amounts to an international tort resulting from breach of treaty, it says nothing about the liability of any officer ordering, nor of personal responsibility of any individual committing a breach. Therefore, until the establishment of the International Military Tribunals at Nuremberg and Tokyo at the end of World War II, all trials of persons charged with committing breaches of the laws and customs of war were conducted by national tribunals [34] applying customary international law,[35] the Hague Regulations,[36] or, in the case of their own personnel, the national military or criminal code.[37]

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[28] *E.g.*, Hague IV Regulations relating to the treatment of prisoners of war, Arts. 4, 7, or the ban on use of poison or denial of quarter, Art. 23, or denying protection to a flag of truce, Art. 32

[29] *Supra* note 130.

[30] Common Arts. 1,2.

[31] *See, e.g., Civilian War Claimants' Association v. The King* [1932] A.C. 14.

[32] *The Times* (London), 24 June 1997

[33] 46 Am. J. Int'l Law (1951 Supp.). 71. Art ,14(V)(b). "Except as otherwise provided in the present Treaty, the Allied Powers waive all reparations claims of the Allied Powers *and their nationals* arising out of any actions taken by Japan and its nationals in the course of the prosecution of the war. ..." (italics added). *See also* Green, "Making Peace With Japan," 6 Y.B.World Aff. 176 (1952).

[34] As to German trials of German accused held in Leipzig after World War I. these were in accordance with Art. 228 of the Treaty of Versailles. the German authorities having declined to hand the accused over to the Allied Powers in accordance with the Treaty.

[35] *See. e.g.*, German trial of Captain Fryatt (196) for attempting to ram a German U-boat while captain of a merchant ship. Garner. International Law and the World War, 1920: see also the trial of Nurse Edith Cavell. Who, in breach of her protected status as a medical person, assisted in the escape of Allied personnel: she was not tried for a war crime as such but for a breach of the German Military Penal Code to which she was not strictly amenable. *id*., 97. *See also Llandovery Castle* (1923). in which U-boat officers were tried by a German tribunal for, "contrary to international law," firing upon and killing survivors of an unlawfully torpedoed hospital ship, Cameron. *The Peleus Trial*. app.IX (1948): trial of Eck-the *Peleus* trial (1945), *id., Re Klein* (1945) for killing civilian nationals contrary to international law 1 T. W.C. 46.

[36] *See, e.g.*, Drierwalde Case (1946) 1 T.W.C. 81, for killing captured RAF personnel contrary to Art. 23(c).

[37] *Muller's Case* and *Neumann's Case* (1921) at Leipzig, H.M.S.O., Cmd, 1422, 26, 36 guilty of ill-treating prisoners of war contrary to German Penal and Military Penal Codes; *see also* U.S. trials of personnel accused of crimes against prisoners or enemy civilians during Korean and Vietnam conflicts, e.g., *US. v. Kennan* (1954)

OFFENCES WITHIN THE JURISDICTION OF INTERNATIONAL TRIBUNALS

It is sufficient for our purposes merely to mention the offenses within the jurisdiction of the International Tribunals without going into excessive detail. By the London Charter establishing the Nuremberg Tribunal[38] jurisdiction was granted over crimes against peace, war crimes and crimes against humanity, and the same was done in the case of the Tokyo tribunal. More important perhaps than the judgments were the General Assembly's Resolution affirming the Principles of International Law Recognized by the Charter of the Tribunal,[39] and the spelling out of these principles by the International Law Commission in 1950[40]:

I. Any person who commits an act which constitutes a crime under international law is responsible therefor and liable to punishment.

II. The fact that internal law does not impose a penalty for an act which constitutes a crime under international law does not relieve the person who committed the act from responsibility under international law.

III. The fact that a person who committed an act which constitutes a crime under international law acted as Head of State or responsible Government official does not relieve him from responsibility under international law.

IV. The fact that a person acted pursuant to order of his Government or of a superior does not relieve him from responsibility under international law, provided a moral choice was in fact possible to him.

V. Any person charged with a crime under international law has the right to a fair trial on the facts and law.

VI. The crimes hereinafter set out are punishable as crimes under international law:
(a) Crimes. against peace. ...
(b) War crimes. ...
(c) Crimes against humanity. ...

VII. Complicity in the commission of a crime against peace, a war crime, or a crime against humanity...is a crime under international law.

Perhaps it should be pointed out here that while the Principles deal explicitly with superior orders, they do so only implicitly insofar as the counterpart of command responsibility is concerned.[41] By way of contrast, Protocol I, 1977, is silent on superior orders,[42] but very

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14 CMR 742; US. v. Calley (1969-71; 1973) 46 CMR -19, I Mil. L. Rep. 2488. For instances of trials by German military courts of members of the German armed forces, with executions in some cases for offenses against Allied personnel, both civilian and military, during World War II, *see* Zayas, *Wehrmacht War Crimes Bureau* 1939-1945, 18-22 (1989).

[38] 1945, Schindler&Toman, *op. cit.*, 911.

[39] Res. 9 (I) 1946, *id.*, 921.

[40] *Id.*, 923.

[41] *See, e.g.*, Green, "Command Responsibility in International Humanitarian Law," 5 International Law and Contemporary Problems 319 (1995); "War Crimes, Crimes Against Humanity and Command Responsibility," 50 Naval War Coll. Rev. 26 (1997), ch. 8 below; Parks, "Command Responsibility for War Crimes," 62 Mil. L. Rev. I (1973); Rosenne, "War Crimes and State Responsibility," *in* Dinstein and Tabory, *War Crimes in International Law*, 65 (1996).

[42] During the final session of the Conference, some states, e.g., Canada (Levie, *Protection of War Victims*, Supp. 40-1 (1985)., made statements indicating that they considered the traditional law denying superior orders as a defense, while accepting it by way of mitigation, to be good law.

specific on command responsibility.[43] Moreover, the Protocol has made it difficult for any superior to claim that he was unaware of the law, since Article 82 requires legal advisers to be "available, when necessary, to advise military commanders at the appropriate level[44] on the application of the Conventions and the Protocol [as well as] on the appropriate instruction to be given to the armed forces on this subject."

The significance of the Nuremberg Judgment may be seen by the manner in which subsequent national war crimes tribunals have referred to and applied the principles stemming from that Judgment.[45] It has proved significant also in the jurisprudence of the Ad hoc Tribunal established for the Prosecution of Persons Responsible for Serious Violations of International Humanitarian Law Committed in the Territory of Former Yugoslavia since 1991 , particularly in relation to the concept of crimes against humanity.[46]

LEGALITY OF WEAPONERY

A problem that confronts the ordinary man in the field is the legality of weaponry. Some weapons are considered to be illegal per se, particularly those that are outdated, such as boiling oil effective against besieging forces or those used against knights in armor, such as the club, battle ax, ball-and-chain and heavy lance, which were useful in dismounting such persons.[47] While a combatant would probably not be held liable merely because he used the weapons issued to him, since he would almost certainly not know what type of ammunition was in fact permitted, it would be illegal for him and subject him to trial to alter the weapons issued so as to cause injuries likely to result in unnecessary suffering, which is forbidden in every text relating to conduct *in bello*.

Occasionally, particular states have sought to ban or declare illegal the employment of "barbarian" forces. Thus, the German War Book[48] condemned as "closely connected with the unlawful instruments of war the employment of uncivilized and barbarous peoples in European wars. ...The transference of African and Muhammedan Turcis to a European seat of War by the French in the year 1870 was ...a retrogression from civilized to barbarous warfare, as these troops had and could have no conception of European-Christian culture, of respect for property, and the honour of women, etc." Today it is clear that such discrimination would be completely contrary to the law and the modem soldier must on no account discriminate among enemy personnel on the basis of sex, race, nationality, religion, political opinion or any other criteria.[49] In other words, in accordance with the basic humanitarian principles on which the law of armed conflict rests, all members of an adverse

[43] Arts. 86, 87

[44] *See, e.g.*, Green, *Essays*, ch. 4; Draper, "The Role of Legal Advisers in Armed Services," 18 Int'l Rev. Red X, 6 (1978).

[45] *See, e.g., Buhler Case* (1948) Polish Supreme National tribunal 14 T.W.C. 23. *See also R. v. Finta* (1994) 112 D.L.R. (4th) 513 (Supreme Court, Canada).

[46] *See, e.g., Prosecutor v. Dusko Tadic* (1997) Case No. IT-94-1-T. See also Green, "Drazen Erdemovic: The International Criminal Tribunal for the Former Yugoslavia in Action," 10 Leiden J. Int'l Law 1997. See also, Dinstein, "Crimes Against Humanity," in Makarczyk, *Theory of International Law at the Threshold of the 21 st Century*, 1997, 891.

[47] Lists of some of these are to be found in both ~he British and U.S. Manuals *op, cit.*, paras. 110, 111, and 34, 37 resp.

[48] *Op. cit.*, pp. 66-7.

[49] Geneva Conventions, 1949, I-Art. 12, II-Art. 12, III-Art.16, IV-Art. 13, Protocol I, Art. 75-this also forbids any discrimination on grounds of "language, national or social origin, wealth, birth or other status, or any other similar criteria."

party are entitled to equal protection. However, by Article 47 of Protocol I, this basic principle of non-discrimination does not extend to mercenaries who are denied the status of lawful combatants and therefore, if captured, are not regarded as prisoners ofwar.[50]

Since the adoption of Protocol II annexed to the 1980 Convention on Prohibition or Restriction on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects,[51] the placing of booby traps, probably one of the easiest weapons that the individual man in the field can make for himself, is illegal if employed .as a reprisal against civilians or is indiscriminately placed so that it "may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof...." It would not, however, be an offense for him to booby-trap a building that has been evacuated by civilians and which he reasonably anticipates is likely to be occupied by members of the adverse party's armed forces.

Other than the Conventional Weapons Convention, as amended, little by way of treaty has been introduced to expand the scope of the law of war beyond what is found in the Hague and Geneva Law. Perhaps, the major development of 1949, arising from the experience of occupied Europe during World War 11, was the adoption of Convention IV[52] relating to the protection of civilians in occupied territory, although all that need be said of it here is that it introduced criminal liability for those committing grave breaches against such "protected" persons. The principal innovation of the four Conventions, however, was the introduction of Article 3 into each of them. This promulgated a minimal statement of rights that would apply even in a non-international armed conflict. It is of interest to mention that the majority of the Trial Chamber of the ad hoc Tribunal for the former Yugoslavia in the Tadic case, while recognizing the significance and application of Article 3, rejected, in the particular circumstances of that case, the contention that the Conventions, including the Civilians Convention, were applicable.[53] Some effort had been made in 1977, with the adoption, first of Protocol I,[54] to extend the law to some conflicts previously regarded as non-international. By Article 1, paragraph 4, wars of national liberation were raised to the level of international armed conflicts governed by the provisions of the law of war, although by Article 44, paragraph 3, protection is given to those who might be described as "farmers by day and combatants by night," provided they "carry their arms openly" during an engagement or while visible to the adversary during deployment preparatory to launching an attack. Extending the effort to humanize non-international conflicts, in which the horrors are frequently far more grave and extensive than they are in international conflicts, Protocol II, 1977,[55] elaborates some measures of humanitarian law that are applicable in a non-international conflict not amounting to a war of national liberation (which would fall within the purview of Protocol I). While Protocol II forbids a variety of acts, it makes no provision for punishment of breaches, nor for that matter is Article 3 common to the Conventions, which also deals with non-international conflicts, included in any of the lists of grave breaches in the four Conventions or in Protocol I. This, omission would imply that there is no way of dealing with breaches of the law committed during a non-international conflict.

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[50] *See, e.g.,* Green, “The Status of Mercenaries in International Law”. *infra*, ch. X~ 8 Israel Y.B. Hum. Rts. 9 (1978). See also Burmester, "The Recruitment and Use of Mercenaries in Armed Conflicts," 72 Am. J. Int'l Law 37 (1978)

[51] Schindler & Toman, op. cit., 179,185, amended 1996,35 ILM 1206,1209.

[52] *Id*., 495.

[53] Judgment, 7 May 1997.

[54] Schindler & Toman, *op. cit.*, 621.

[55] *Id.*, 689.

However, since both Protocol II and common Article 3 forbid certain types of action, it must be presumed that the intention is that such activities must be amenable to trial and punishment. Further, most of the acts forbidden by Protocol II and especially those listed in common Article 3 would, when directed against humans, almost certainly' amount to crimes against humanity, thus giving rise to universal jurisdiction. Moreover, the Statutes of both the *ad hoc* tribunals established to deal with breaches of the law occurring in Rwanda or the former Yugoslavia clearly envisage criminal jurisdiction as being applicable to such conflicts,[56] although the Judgment of the Trial Chamber in the Tadic *Case*[57] has apparently reduced the significance of the Conventions in such conflicts.

ENVIRONMENTAL CONCERNS – NUCLEAR WEAPONS

Among other developments in the law Introduced in 1977 are those relating to protection of the natural environment which to some extent bring the modern law into line with such ecological injunctions as, those relating to the immunity of trees and the like in the Old Testament. By Article 55 of Protocol I, "[c]are shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health and survival of the population." Even more in direct line with the Old Testament or the military codes of the feudal period is Article 54, whereby it is forbidden .Ito attack, destroy, remove or render useless objects indispensable to the survival of the civilian population, such as foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works, for the specific purpose of denying them for their sustenance value to the civilian population of the adverse Party, whatsoever the motive."

The nuclear weapon seems most likely to adversely affect the environment and cause widespread, long-term and severe damage. However, since the International Committee of the Red Cross and the major powers considered the issue to be one of disarmament rather than means or methods or warfare, the Protocol does not deal with this weapon in any way. It does, however, I grant protection to “works or installations containing dangerous forces, namely dams, dykes and nuclear electrical generating stations”.[58]

Outside of treaty, however there have been some developments in relation to the nuclear weapon. In 1996, the International Court of Justice handed down its Opinion on *The Legality of the Threaty or Use of Nuclear weapons*,[59] pointing out that “not having found a conventional rule of general scope nor a customary rule specifically proscribing the threat or use of nuclear weapons per se, it [became necessary to deal] with the question whether recourse to nuclear weapons must be considered as illegal in the light of the principles and rules of international humanitarian law applicable in armed conflict..,” bearing in mind the continued significance of the Martens Clause…..[H]umanitarian law at a very early stage, prohibited certain types of weapons either because of their indiscriminate effects on combatants and civilians or because of the unnecessary suffering caused to combatants.[60];

[56] Rwanda, S.C. Res. 955 (Annex), 1994. 33 ILM 1598; Yugoslavia, S.C. Res. 827 (Annex) 1993.
[57] *Supra* note 154.
[58] Art. 56
[59] 25 ILM 809
[60] In view of the effects of the nuclear weapon, this implies that even tactical weapons used in the field are likely to be considered illegal as inhumane. *See* 94

that is to say, a harm greater than that unavoidable to achieve legitimate military objectives. If an envisaged use of weapons does not meet the requirements of humanitarian law, a threat to engage in such use would also be contrary to that law…...[Moreover,] these fundamental rules [embodied in the Hague and Geneva Conventions] are to be observed by all States whether or not they have ratified the conventions that contain them because they constitute intransgressible principles of international customary law."[61]

Insofar as it has been suggested that the accepted rules were irrelevant since they developed before the invention of nuclear weapons, the Court noted that the conferences of 1949 and 1994-97 left these weapons aside and accepted that “there is a qualitative difference between nuclear weapons and all conventional weapons.

However, it cannot be concluded from this that the established principles and rules of humanitarian law applicable in armed conflicts did not apply to nuclear weapons. Such a conclusion would be incompatible with the intrinsically humanitarian character of the principles in question which permeates the entire law of armed conflict and applies to all forms of warfare and to the kinds of weapons, those of the past, those of the present and those of the future."[62]

Having thus emphasized the validity of the rules of international humanitarian law, the Court not surprisingly found itself unable to

make a determination on the validity I of the view that the recourse to nuclear weapons would be illegal in any circumstances owing to their inherent and total incompatibility with the law applicable in armed conflict. Certainly, ...the principles and rules of law applicable in armed conflict-at the heart of which is the overriding consideration of humanity-make the conduct of armed hostilities subject t a number of strict requirements. Thus, methods and means of warfare, which would preclude any distinction between civilian and military' targets. or which would result in unnecessary suffering to combatants. are prohibited. In view of the unique characteristics of nuclear weapons ...the use of such weapons in fact seems scarcely reconcilable with respect for such requirements. Nevertheless, the Court considers that it does not have sufficient elements to enable it to conclude with certainty that the use of-nuclear weapons would necessarily be at variance with the principles and rules applicable in armed conflict in any circumstance. ...[63]

In the light of this reasoning the Court concluded that it "cannot lose sight of the fundamental right of every" State to survival, and thus the right to resort to self-defence, in accordance with Article 51 [of the Charter], when survival is at stake….. Accordingly, in view of the present state of international law viewed as a whole the Court is led to observe that it cannot reach a definite conclusion as to the legality or use of nuclear weapons by" a State in an ex1reme circumstance of self-defence, in which its very survival would be at stake…."[64]

All one can say on the basis of the Court’s Opinion is that the use or threat to use the nuclear weapon would be contrary to the principles of international humanitarian law and therefore illegal. However in circumstances in which a state may feel-and this is a matter of pure auto-

[61] 78, 79
[62] 88
[63] 95
[64] 96

interpretation for the state itself-that its very survival is at stake, then a recourse to the use of this weapon might nevertheless be lawful !

Just as there is no black-letter law with regard to nuclear weapons, so there is no treaty law concerning aerial warfare. However, In 1923 a Committee of Experts drew up a code of draft Rules of Air Warfare[65] that are generally regarded as, "to a great extent, correspond[ing] to the customary rules and general principles underlying the conventions on the law of war on land and at sea."[66] We also find in the decision of the Nagasaki District Court, when considering the legality of the atomic attacks on Hiroshima and Nagasaki, some judicial comment to Support this view[67]:

The Draft Rules of Air Warfare cannot directly be called positive law, since they have not yet become effective as authoritative with regard to air warfare. However, international jurists regard the Draft Rules as authoritative with regard to air warfare. Some countries regard the substance of the rules as a standard of action by armed forces, and the fundamental principles of the Draft Rules are consistently in conformity with international law regulations and customs at the time. Therefore, we can safely say that the prohibition of indiscriminate aerial bombardment on an undefended city and the principle of military objective which are provided by the Draft Rules, are international customary law [allowing for developments in terminology, this finding has much in common with the Opinion of the World Court], also from the point that they are in common with the principle in land and sea warfare. Further, since the distinction of land sea and air warfare is made by the place and purpose of warfare. *We think that there is also sufficient reason for argument that, regarding the aerial bombardment of a city on land, the laws and regulation respecting land warfare analogically apply since the aerial bombardement is made on land.*

This last statement prophetically anticipates Article 49 of Protocol I, which is part of the Section (Part IV Section I) on General Protection against Effects of Hostilities and is itself concerned with the definition of attacks and scope of application. By paragraph 3, “[t]he provisions of this Section apply to any land, air or sea warfare which may affect the civilian population individual civilians or civilian objects on land. They further apply to all attacks from the sea or from the air against objectives on land but do not otherwise affect the rules of international law applicable in armed conflict at sea or in the air.”

CONCLUSION

From what has been said herein it is clear that since earliest times there has been recognition that humanity and the future survival of society demand that limitations be placed upon the means and methods of warfare; this remains the case today, whether the hostilities take place in international or non-international conflicts. As is made clear by the Martens Clause, which the world Court has indicated is just as significant today as when Martens introduced it, when seeking the law of war it is not enough to look merely at the written documents drawn up and accepted by states as treaties. These reflect what has developed in practice, representing which restrictions states are prepared to impose upon their armed forces. Although it may not

[65] Schindler & Toman. op. cit,. 207
[66] *Id.*, *See also* Spaight, *Air Power and War Rights*, 142-3 (1947); *Oppenheim’s International Law*, vol. 2, 519 (7th ed., 1952): Schwarzenberger. 2 *International Law*. 153 (1968): Levie, *The Code of International Armed Conflict*. vol.1.207-26 (1985).
[67] *Shimoda v. Japan* (1963) 8 Jap. Ann. lnt'l Law 212, 237-8 (1963); 32 ILM 626, 631 (emphasis in original).

always be easy to ascertain what are claimed ,to be the customary rules in this regard, the principles of humanity and the dictates of public conscience, along with considerations of the accepted practices of the most significant military forces, are probably sufficiently well known and accepted to provide the necessary guidance.

Despite the fact that modern tribal wars seem to suggest that what was regarded as almost universally accepted behavior cannot now be so considered, it may be that the principles referred to are no more nor less than what Article 38 of the Statute of the International Court of Justice refers to as general principles of law recognized by civilized nations-though they may be nothing more than the principles that "we and our friends, all of whom are civilized," generally recognize as principles of law and, as such, binding !

MEANS AND METHODS OF COMBAT

HANS BLIX

Contents

A. Scope of Discussion

The rules of international law imposing restraints upon the means and methods of combat are derived from custom and conventions, e.g., the Hague Conventions. The very principle of restraint is stated in Article 22 of the Hague Regulations annexed to the Hague Convention No. IV, to the effect that "the right of belligerents to adopt means of injuring the enemy is not unlimited".

The 1977 Protocols additional to the Geneva Conventions of 1949 contain the most recent rules of the law of armed conflicts. Protocol I does not contain any comprehensive regulation imposing restraints. Indeed, the preamble of the Protocol states the truth -but not the whole truth -when describing the Protocol as supplementing the 1949 Geneva Conventions. In fact Part III, covering methods and means of warfare, and Part IV covering civilian population, contain vitally important rules which may be said to supplement the Hague Conventions more than the Geneva Conventions.

That the scope of the "additional" protocols was broader than that of the Conventions to which they were added was a somewhat controversial point throughout the 1974-1977 Geneva Diplomatic Conference. There was a body of opinion -which gradually diminished -that the Conference should confine itself strictly to the protection of the victims: the wounded, the prisoners, and the civilians. Those who held this view considered articles regarding area bombardment, perfidy, starvation, weapons causing unnecessary suffering, etc., as outside the proper scope of humanitarian law.

Another widely held opinion was that the distinction was somewhat artificial. Is a rule protecting the victim of saturation bombing more "humanitarian" than a rule restricting the use of this method? Are not the rules of warfare, after all, humanitarian in purpose? To these reflections was added the view that rules on methods and means of combat, which had not been reviewed since the turn of the century, were in even greater need of up-dating than the rules protecting victims of war, which had been the subject of comprehensive revision in the 1949 Conventions. After World War II, and during the Indochina war particularly, the lack of rules on bombing from the air was felt to be absurd. (Draft rules were elaborated by the International Commission of Jurists in 1923, but were not put into effect).[1]

Efforts limited to the drafting of additional rules on the appointment of protecting powers, on the evacuation of wounded, on the protection of civil defence personnel, etc., -ignoring the question of restraints on methods and means of combat -would have been hard to justify to the public.

The opinion which favoured the broader approach prevailed in large measure but its adherents refrained from pressing a demand that agreement on prohibitions or restrictions of use of specific conventional weapons be reached at the conference. Only France demurred to the end and declared that Article 35, which states that "in any armed conflict the right of the parties to the conflict to choose methods and means of warfare is not unlimited", was the first of a series of articles which went beyond the strict confines of humanitarian law and in fact regulated the law of war. It had "direct implications for the defence and security of states". The comment is incontrovertible, but even the rules relating to the protection of POWs, civil defence, ambulances, aircraft, etc., have implications for the defence and security of states.

Although the rules on methods and means of combat contained in the 1977 Protocol are not comprehensive, they might serve as the basis for discussion in this chapter. It seems all the more justified to use the limited space of the present chapter for this purpose as there exist many authoritative commentaries on the older rules. Accordingly the discussion below will deal first with the general rationale for the restraints imposed by Article 35 of the 1977 Protocol and with the types of restraints which exist. Thereafter, the discussion will focus upon the concepts of "unnecessary suffering" and "superfluous injury" inflicted by weapons, upon the principle of distinction between civilians and combatants and upon various restraints on means and methods of combat designed to protect civilians, viz., rules against the use of terror, starvation, indiscriminate methods and means including area bombardment. In this context the rule of proportionality will be examined together with the rules on precautionary measures required to avoid incidental effects upon civilians. Lastly, the rules of restraint devised to protect the environment will be examined.

B. Rationale for Restraints

The basic rule in Article 35 paragraph I that the right of the Parties to armed conflict to choose methods or means of warfare is not unlimited, and the earlier similar rule in Article 2 of the Hague Regulations are a general reminder that violence is permitted only in so far as it serves the specific purpose of subduing the enemy. The rationalism and humanitarianism which pervaded the enlightenment and the teachings of Jean-Jacques Rousseau, one of the inspirers of the laws of war, required that no suffering be inflicted, no injury caused, and no destruction or damage brought about which was not necessary for the sole legitimate purpose of overcoming the enemy.

Suffering, injury, destruction or damage should not be inflicted for personal reasons or- for punishment. It followed from this that, from among several available means of achieving a legitimate military aim, should be chosen those which inflicted least suffering, injury, destruction or damage. It is said, for example, that if an enemy soldier can be placed hors de combat by being taken prisoner he should not be injured; if he can be disabled, he should not be killed, and if he can be neutralized by light injury, he should not be severely wounded.

While this reasoning obviously cannot be so rigorously applied as to oblige a soldier in the heat of battle to aim only at non-vital parts of the enemy's body, important conclusions do follow from it and most existing restraints can in fact be said to have been derived from it. This is true notably of the prohibition of the use of means and methods likely to cause superfluous injury or unnecessary suffering. The requirement that a distinction should at all times be made between the civilian population and combatants, and between civilian objects and military objectives, and that military operations shall be directed only at the latter (Article 48 of the 1977 Protocol) is also derived from the notion that the enemy can be overcome by attacks on such objectives, and that it is therefore not necessary to direct military operations against the civilian population or against civilian objects.[2] With the increasing ability to attack targets anywhere by air and the increasing industrial and economic integration of states, the category of legitimate military objectives has grown, but the basic rule and reason remain.

The principle of distinction is listed not in Article 35, under the basic rules regarding methods and means of combat, but in Article 48, in Part IV on the protection of the civilian population. Another basic rule is introduced in Article 35 paragraph 3, namely, the protection of the natural environment. This rule, like the two discussed above, is based on the postulate that, for the achievement of the legitimate aim of overcoming the enemy, it is not necessary to use "methods or means... which... may be expected to cause widespread, long-term and severe damage to the natural environment".

It may be concluded that the three major categories of restraints -aiming at protection against unnecessary suffering and superfluous injury, and protection of the natural environment -and the detailed rules which emanate from them have all developed with full account being taken of the needs of belligerents to be free to use all the methods and means which are rationally required to overcome the enemy. The notion of "military necessity" cannot be invoked against rules which already make allowance for it. This will be evident in the closer scrutiny below.

C. "Superfluous Injury" and "Unnecessary Suffering"

It is to be hoped that the wording of Article 35 paragraph 2 of the 1977 Geneva Protocol to the effect that "it is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering" will straighten out some interpretative tangles which have resulted from the English version of the Hague Regulations which used the expression "calculated to cause unnecessary suffering" (Art. 23 paragraph e). While the French *propres d causer des maux superfius* has not raised problems, the expression "calculated to" has occasionally and erroneously been taken to mean that the "unnecessary suffering" would have to be proved intentional. The expression "of a nature to" avoids this subjective interpretation. The expression, "unnecessary suffering" has never fully covered the meaning of the French *maux superfius*, which more broadly signifies excessive harmful effects. It seemed justified, in view of the long use of the expression "unnecessary suffering" in various war manuals, to render the French formulation by the two English notions of "superfluous injury" and "unnecessary suffering".

In introducing "methods of warfare" in the same prohibition, Article 35 paragraph 2 extends the scope of the principle far beyond the letter -although perhaps not the spirit -of the 1907 formulation. Most discussions of this article have dealt with the guidance it may give as to the legality of particular weapons. The main questions -and they are not minor -concerning this article are the meaning of the word "unnecessary" and how "suffering and injury" are measured. The latter problem is perhaps the least intractable. The "injuries" caused by a weapon may be measured. The suffering inflicted by a weapon depends on individual reactions which vary greatly. It is hard, if not impossible, to quantify, even though it seems evident that some weapons would unquestionably cause more suffering than others, e.g., a gas merely rendering a soldier unconscious for a short time, as compared to a gas causing cramps and paralysis for a prolonged period. At a conference of government experts from a wide variety of states, it was generally considered that "injury" and "suffering" comprised such factors as mortality, the pain or severity of wounds, permanent damage and disfigurement.[3]

This conclusion would seem to be consistent with that which may be drawn from the historical background to the rule. That background also helps in understanding the meaning of the term "unnecessary". The 1868 St. Petersburg Declaration banned the use of projectiles weighing less than 400 grammes and which are explosive or charged with fulminating or inflammable substances. The rationale of this prohibition and the preamble of the Declaration remain important:

(2) that the only legitimate object which states should endeavour to accomplish during war is to weaken the military forces of the enemy;

(3) that for this purpose it is sufficient to disable the greatest possible number of men;

(4) that this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable ;

(5) that the employment of such arms would, therefore, be contraryto the laws of humanity".

The idea underlying these rules was no doubt that, if explosive or inflammable projectiles were to be effective against objects such as buildings, they would have to weigh more than 400 grammes. If they weighed less they would be effective only against human beings but would then cause injury in excess of what was necessary to disable and thereby "uselessly aggravate" suffering. The required result could be obtained by the use of projectiles which relied solely on their kinetic energy for effect. The reasoning starts from the premise that the enemy is hit, and assumes that any hit will place a man hors de combat. Accordingly, injuries by projectile hits should not be made worse by explosive, incendiary or, for that matter, any other additional effects. Such additional effects are even more inadmissible if they render death inevitable. A bullet contaminated with lethal poison or a lethal infectious substance would be a case in point.

The type of projectile banned in the St. Petersburg Declaration later became useful against aircraft, and to this extent the ban must be regarded as having lapsed into desuetude. The rationale of the ban, namely to protect men against this type of projectile, still holds good, however, and this being so it may well be maintained that the ban, too, holds good.

The Hague Declaration of 1899 on the dumdum-bullet prohibited the use of "bullets which expand or flatten easily in the human body, such as bullets with a hard envelope which does not entirely cover the core or is pierced with incisions". Here, again, it was felt that the kinetic energy of a merely piercing bullet had a sufficient disabling effect and that the more severe wound which would result from a mushrooming bullet was an additional effect that could not be justified. Although the British delegation protested that ordinary piercing bullets were inadequate to stop "savages" from further fighting, such bullets were generally considered sufficient to disable a man.

From these two bans the least conclusion to be drawn is that a weapon which disables must not be given additional effects, i.e., increase the injury. A somewhat broader conclusion seems fully justified and is often drawn, namely, that it is unlawful to use a weapon which causes more suffering or injury than another which offers the same or similar military advantages. A third conclusion is that, to judge the legality of any given weapon, its military value must be weighed against the suffering/injury it causes. This conclusion is akin to the second, since the "military value" of a weapon can hardly be appreciated except when related to others.

It follows that the assessment of the legality of a weapon must take a number of factors into consideration, such as: disabling effect, hit probability, weight, cost, degree of injury, suffering, killing power. To assess these properties does not raise insuperable difficulties. It is when they are weighed against each other that the subjective element becomes dominant. That element can only be significantly reduced when the weapon in question and its merits and demerits from the humanitarian and military viewpoints are related to an alternative weapon.

It has been suggested that the practice of states "represents the best evidence of what reasonable men believe to be lawful and necessary weapons in war".[4]

The same view is taken in the US Manual of Land Warfare:

> "What weapons cause unnecessary injury can only be determined in light of the practice of states in refraining from the use of a given weapon because it is believed to have that effect..."[5]

This test begs the question, however. It is not helpful to a state that is aboutto determine whether a particular new weapon is legal. It may only be of help inasmuch as a weapon which is widely in use is unlikely to have been regarded as illegal by the governments using it. Such a practice would certainly weigh heavily, if not conclusively, on the judgement of the matter by ap independentntribunal. But, for a weapon employed by some and consistently proclaimed illegal by others, no such presumption of lawfulness would be possible: the question is no different from other practices of states which mayor may not constitute custom, depending upon how widespread and how little contested they are.

D. National Determination of the Legality of Weapons

In Article 361abelled '.new weapons" the 1977 Geneva Protocol prescribes that:

> "in the study, development, acquisition or adoption of a new weapon, means or method of warfare, a High Contracting Party is under an obligation to determine whether its employment would, in some or all circumstances, be prohibited by this

> Protocol or any other rule of international law applicable to the High Contracting Party".

Evidently, even without an article of this kind, it is incumbent upon a state to determine whether the means or methods of warfare it might employ are legal. The article serves to underline this duty, and this emphasis has already found administrative expression in several states which have established special procedures or mechanisms for, the determination described.[6] The new rule has been hailed as a practical means of heightening government attention to the problem of weighing the military merits against the humanitarian demerits of new weapons.[7] The Soviet delegate was particularly pleased that no "supranational control organization" was introduced.[8]

Authorities -whether national or international- whose task it is to determine the permissibility of use of a weapon which is not commonly employed without protests will have to rely upon analyses, such as those above, of the question of unnecessary suffering/injury. But this rule is not the only one which would be relevant, however. Such authorities would also have to examine whether a given weapon contravened the prohibition on the use of means of warfare having indiscriminate effects (Article 51 paragraph 4(b)). This rule will be discussed below in connection with the principle of distinction. Although "treacherous" - Hague Regulation Art. 23 paragraph b -or "perfidious" -Geneva Protocol Art. 37 -means of warfare are prohibited, it is often assumed that weapons which might be indicted on this ground would equally fall under the proscription of indiscriminate weapons.[9]

Such authorities would have to look also to existing specific bans on use, not all of which are necessarily based on the criteria of unnecessary suffering/injury, or indiscriminateness. The prohibitions on the use of chemical and bacteriological weapons and of poison are cases in point. They constitute rules of international law "applicable to the High Contracting Party", regardless of ratification or accession, since both conventional rules have acquired the status of customary law.

E. Intergovernmental Discussions of Bans on the Use of Conventional Weapons

International examinations of different categories of weapons have been few and far between. After the negotiation of the Geneva BC-protocol of 1925 and the discussions at the 1932-34 League of Nations Disarmament Conference on incendiary and other weapons, discussions on specific weapons have taken place only at the 1974-1977 Geneva Conference and, in particular within its *ad hoc* commission.

As a follow-up to the recommendation of the Conference, the United Nations General Assembly convened a Conference on Prohibitions or Restrictions on the Use of Certain Conventional Weapons, which was held in Geneva in 1979 and 1980. The Conference adopted the Convention on Prohibitions or Restrictions on the U se of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to have Indiscriminate Effects. Three Protocols were annexed to this Convention: the Protocol on Non-Detectable Fragments (Protocol I), the Protocol on Prohibitions or Restrictions on the Use of Mines, Booby Traps and Other Devices (Protocol II), and the Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III). The Conference also adopted a Resolution on Small-Calibre Weapon Systems.[10]

Lack of space prevents us from examining the different categories of weapons whose use is subject, or might be subject, to prohibitions or restrictions. Hence we have confined ourselves to certain questions of principle. However, before studying such questions it would be desirable to consider a few points.

Apart from the review procedure which, in conformity with Article 8 of the Convention, is in the hands only of States Parties to the Convention and the protocols, any High Contracting Party may on its own initiative call for a new Conference to be convened ten years after the entry into force of the Convention. "

The Depositary is obliged to convene it accordingly. Thus the Convention acquired a lasting value thanks to the mechanism leaving the door open to other restrictions and "by urging all States to practice constant vigilance to ensure that conventional weapons conform with the principles laid down in Protocol I of 1977. The revision method also represents a valuable addition to Article 36 of Protocol I, which binds all Contracting Parties to examine all new weapons toe make sure their use is not prohibited by international law".[11]

Another feature which might be mentioned is the following: Article 36 of the 1977 Geneva Protocol asks for a determination of whether a "new weapon, means or method" would "in some or all circumstances" be prohibited. Prohibition on the use of a weapon "in some circumstances", e.g., anti-personnel use of or use in populated areas, would in fact constitute a restriction on the methods of using a particular weapon.

F. The Principle of Distinction

The principle of distinction is the premise of several important rules regarding means and methods of warfare. Most of them are found in Article 51 of the 1977 Geneva Protocol.

It should be noted that these rules are confined to warfare affecting civilians or civilian objects on land, lakes, rivers, canals and other waterways, but not territorial waters. After much discussion at the Geneva Conference it was decided that the rules should not apply t naval and air warfare, except as regards attacks from the air or the sea against objectives on land.[12]

For warfare at sea, for which a large body of law exists, this is an important limitation: civilians and civilian objects at sea will not be protected by the new rules, but only by the older laws. For air warfare, however, which IS mostly directed against objectives on land and which, moreover, has so far been governed only. by general principles, the rules in the 1977 Geneva Protocol are an expansion of the law.

a. *Terror*

Article 51 paragraph 2 prohibits methods of war -"acts or threats of violence" -the primary purpose of which is to spread terror among the civilian population. The provision was adopted after considerable discussion, primarily on two points. One trend of opinion, which finally did not prevail, wished to outlaw "propaganda" as a means of spreading terror. A more important difference arose between those who wished the article to cover only acts "intended" to spread terror and those who wished it to cover all acts actually causing or capable of spreading terror. It was underlined that the effect of the Article would be limited if it only covered cases where intention could be proved. On the other hand it was said -that many acts or threats of violence would, in fact, spread terror although this was not their purpose. The wording eventually adopted steers between these difficulties. The criterion of intent was discarded and the wording chosen does not cover the cases where terror is a - perhaps even foreseeable - incidental effect. Acts whose primary purpose must, on an objective assessment, be deemed to be the spreading of terror are prohibited.[13]

b. *Starvation*

The general protection of civilian objects and the injunction in Article 52 paragraph 2 that attacks shall be strictly limited to military objectives should suffice in many cases to protect the civilian population from losing its means of sustenance. A new Article on the subject has been introduced, however, emphasizing this protection, extending it even to various objects which might fall under the definition of military objectives, and giving more precise guidance.

Article 54 on the protection of objects indispensable to the survival of the civilian population was adopted by consensus. It lays down in its first subparagraph that "starvation" as a method of warfare is prohibited.[14] This is really an introductory statement of the aim of the Article. The precise legal injunctions which may help to achieve this aim are found in the following subparagraphs and also in Article 55, protecting the natural environment,[15] Articles 68- 71 on relief, and the 1925 Geneva Protocol prohibiting the use of chemical and bacteriological Weapons).

Article 54 paragraph 2 protects "objects indispensable to the survival of the civilian population" against attacks, destruction removal etc., even by way of reprisal action. It offers a number of examples of such objects: food, agricultural areas, crops, animals, drinking water, installations, supplies and irrigation works. Although the list is not exhaustive -"tools" could be added for instance -it is believed to offer very useful guidance.

There are some important limitations upon this new rule designed to give effect to the principle of distinction. The first is that objects used as "sustenance solely for the members of the armed forces" of the adversary are not protected. It is a restricted exception. A food supply needed by the civilian population does not lose its protection simply because it is also used by the armed forces and may technically qualify as a military objective. It has to be used exclusively by them to lose its immunity. An even more understandable exception is the case where the objects are used by the adversary "in direct support of military action", although not as sustenance. It is not prohibited to shell the enemy merely because he is in a food growing or a food supply area. Such areas may obviously also be fired upon so as to deny the enemy access to them.[16]

The third exception, expressed in Article 54 paragraph 5, is included to sanction the scorched earth tactic. It is confined to use on a party's national territory and, in that case, to areas under the party's own control. It gives a party whose national territory is subjected to an enemy invasion a degree of freedom of action which it does not give armed forces withdrawing from enemy territory. Since the exception will place the party's own remaining civilian population in jeopardy, it may be assumed that there are natural inhibitions in using this tactic. In any case, it may be used only "where required by imperative military necessity".

The new rule is not meant to affect the principles concerning naval blockades.[17]

c. *Indiscriminate Means*

Under Article 51 paragraph 4 an attack may not be launched by employment of a "means of combat which cannot be directed at a specific military objective" or a "means of combat, the effects of which cannot be limited as required by this Protocol".

There was some difference of opinion as to whether any weapons actually existed which could not be directed at a specific military objective or the effects: of which could not be limited as required by the rule of proportionality.[18]

Some delegates denied the existence of any weapon which, under the article, would be prohibited in all circumstances. They took the article as a reminder that the lawful use of means of combat depended upon circumstances."

Possibly this position was prompted by a wish to guard against any implication, that Article 51 paragraph 4 could be Invoked In support of the view that the use of nuclear weapons is prohibited. If so, the positions would seem to have been taken *ex abundanta cautela*, since the drafts submitted by the ICRC were not intended to introduce rules governing atomic, bacteriological and chemical weapons."[19]

It is certainly unlikely that weapons which are incapable of being directed at military objectives will be widely used. Reasons of economy alone will speak against such weapons. But are they totally excluded? The Military Manual of the Federal Republic of Germany stated that "the use of flying bombs (e.g. rockets) is not permissible when they can only be so imprecisely directed that the whole effect of the weapon hits the civilian population".

Bacteriological weapons, the use of which is banned under the 1925 Geneva Protocol, would presumably be another category which is difficult or impossible to direct. The same would be true to many environmental means of warfare.

Although, accordingly, it may be queried whether it is justified to exclude the existence or possible emergence of means of warfare incapable of being directed at military objectives, it is certainly correct to say that the legality of the use of most weapons depends upon the manner in which they are employed. A rifle may be lawfully aimed at the enemy or it may be employed indiscriminately against civilians and soldiers alike. Bombs may be aimed at specific military targets or thrown at random. The indiscriminate use of the weapon will be prohibited, not the weapon as such.

The question as to whether there can be means -weapons -the effect of which cannot in any circumstances be limited as required by the rules of the Protocol, notably the rule of proportionality, is most likely to be answered in the negative. That rule requires that the incidental effects upon civilians and civilian objects must not be excessive in relation to the direct military advantage anticipated. If the means -weapons -are at all capable of being directed, one can always envisage the location of military targets so isolated that an infringement of the rule of proportionality is inconceivable. Hence, the legality of the use of such weapons would depend upon the circumstances.

The difference of opinion regarding the existence of indiscriminate means of combat does not extend to indiscriminate *methods* of combat. Even those who denied that there existed any weapon which was indiscriminate by nature, maintained that the question that could arise was whether a particular use or method of use of a weapon was indiscriminate. The laying of unanchored automatic contact sea mines -prohibited by The Hague Convention No. VIII –is a classical example of an indiscriminate -illegal -method of using a weapon. Innumerable other methods of combat may be imagined which do not permit direction at specific military targets or limitation in their effects, as required, notably by the rule of proportionality. One such method, much discussed, is area bombardment. Under Article 51 paragraph 5 (a) a ban is introduced upon attacks

> "by bombardment by any methods or means which treats as a single military objective a number of clearly separate and distinct military objectives located in a city, town, village or other area containing a similar concentration of civilians or civilian objects".

The authors of the article "considered it unnecessary to refer to 'massive' bombardment, 'target area' bombardment, or 'carpet bombing', since all are covered by this prohibition; and use of such expressions might be construed to restrict the protection of civilians from other types of bombardment".[20]

The adoption of this provision is seen as an important humanitarian gain. Bombardment of large urban areas containing scattered military objectives has certainly been one of the worst war methods from the viewpoint of civilian populations. It has been severely criticized from the humanitarian and legal viewpoints, and its military value has also been questioned. It may be assumed that this combination of circumstances made the adoption of the rule possible. It should be noted that the prohibition is confined to the situation where the humanitarian case is the strongest, namely in areas where there is a concentration of civilians or civilian objects. Area bombardment of countryside is not affected. Even with this limitation the provision was unacceptable to one country. The French delegation declared that

> "in a good many situations of armed conflict it would be very difficult, if not impossible, to determine precisely what constitutes a military objective especially in large towns or wooded areas, either of which might harbour indiscriminately enemy military forces and groups of civilians more or less closely mixed together".[21]

Despite its apparent straight-forwardness, the expression "clearly separate and distinct military objectives" which was adopted after much discussion, raises some questions. How far apart should the objectives be to require separate attacks? This question is not answered in the rule, nor is it answered in the only military manual containing a provision on the matter, that of the Federal Republic of Germany, which simply made it "forbidden to treat several military objectives and populated areas between them as a single objective and to attack or bombard this area indiscriminately in its entire extension".[22]

While the ICRC draft described the military objectives as being “at some distance from each other”, one amendment sought to describe them as “so distant from one another that it is

reasonably possible to attack them individualy".[23] Another amendment would have placed them "'at such distance from each other that they are capable of being attacked individually"[24]
The US representative stated, in explaining the positive vote of the United States, that in his view the expression adopted

> "refers not only to a separation of two or more military objectives which can be observed or which are visually separated, but also includes the element of significant distance. Futhermore, that distance must be at least sufficient to permit individual military objectives to be attacked separately"..

The problem is linked to weapons. Two objectives that are "'clearly separate and distinct" if laser-guided "'smart" bombs are used, may not be distinct if other bombs are used. Such difficulties of interpretation cannot, of course, serve as excuses for any relapses into some of the methods used in World War II, which the new rule is intended to preclude.

Another question raised by the new rule is what is meant by "'military objectives". That term is defined in article 52 as follows:

> "In so far as objects are concerned, military objectives are limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage".

It must be noted that several representatives of Western governments went on record as interpreting the above definition of military objectives as also covering "a specific area of land... if, because of its location or for other reasons specified in the article, its total or partial destruction, capture or neutralization, in the circumstances ruling at the time, offers a definite military advantage".[25] However, this interpretation was advanced under the discussion of Article 52 -draft Alticle 47- not under the article on indiscriminate methods of combat, and the intention does not seem to have been to reduce the scope of the latter article. The interpretation seeks to point not to cases where there are several military objectives in an area, but to those where a specific area -the whole of it -is a genuine military objective. There might indeed be a legitimate military need to pound an area -rather than specific objects - before a ground attack or to deny that area to the enemy.

G. Precautions and Proportionality

Various modern means and methods of combat have contributed to the increasing toll of civilian victims in modern armed conflicts. The method of bombardment of urbanized areas has been discussed above. Two other threats to the principle of distinction are intended to be averted by article 57, namely that of inadequate identification of objectives as military before attack, and that of attacks of military objectives with excessive incidental effects upon civilians and civilian objects.

No precision in the attack of a target or precaution to avoid effects beyond the target is helpful if the target itself is wrongly identified as military, e.g., a civilian village identified as a guerrilla base. Various methods of automatic identification of targets, e.g., by electronic or infra-red devices, may endanger the civilian population, particularly in attacks on land.

Electronic sensors which register vibrations of trucks and release air attacks may not be capable of distinguishing between ammunition transports and busses of school children. Infra-red sights will register civilians and soldiers without distinction. While no specific ban on devices such as these is introduced, Article 57, on precautions in attack, enjoins those who plan or decide upon an attack to

> "do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects...and that it is not prohibited by the provisions of this Protocol to attack them",

It should be noted that the provision is directed to those who plan or decide upon the attack. Those who actually perform the attack will often, with modern methods and means of combat, be unable to see in advance what they attack. Where they do so, however, and discover that the target has been wrongly identified, they must refrain from attack. Article 57 (2b) requires that '.an attack shall be cancelled or suspended if it becomes apparent that the objective is not a military one" or for any other reason should not be attacked. Even objects which may constitute military objectives under Article 52 may be immune from attack, e.g., because they contain dangerous forces, (Article 56) or are indispensable for the survival of the civilian population (Article 54), or where attack would result in excessive civilian losses.

Two other points should be noted. The parties are enjoined to give "effective advance warning" of attacks which may affect the civilian population, "unless circumstances do not permit". The term "feasible" which was preferred to "reasonable" was intended to mean "that which is practicable or practically possible".[26]

Although the rules of the Protocol do not apply to naval operations or air warfare which do not affect civilians or civilian objects on land (Art. 49). Article 57 paragraph 4 nevertheless contains a general injunction that even in such operations the parties shall take “all reasonable precautions to avoid losses of civilian lives and damage to civilians”.[27]

While the first requirement for the protection of the civilian population is adequate identification of military objectives, the second is that attacks be made in such a way and with such means and methods that incidental effects upon the civilian population are avoided or minimized. (Art. 57 paragraph 2 (ii)). The so-called rule of proportionality is an amplification, albeit controversial, of this general requirement.

The rule of "proportionality", which appears in the military manuals of several states, is now included in Art. 57 paragraph 2 (iii). The Article as a whole deal with "precautions in attack" and the insertion of the principle in this context is intended to indicate that the principle is adopted for the purpose of urging restraint, not of legitimizing civilian losses. The provision requires a party to

> "refrain from deciding to launch any attack which may be expected I to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated"

As noted above, an attack which is already under way shall be cancelled-where possible -if it becomes apparent that the rule would be infringed.

It has been frequently said that it is impossible to assess what civilian losses are "disproportionate" to a specific military advantage. The rule adopted has indeed, discarded this commonly used term and speaks of losses, injury and damage "excessive" in relation to the military advantage. The notion of any quantifiable proportions is perhaps somewhat reduced, but basically the judgement which is to be exercised is the same. That judgement necessarily contain a large subjective element. How important is the military advantage gained by the attack? How serious are the civilian losses to be regarded? Only practice world opinion and the judgement of tribunals will answer these questions.

Some representatives were of the opinion that it would have been better not to include the rule of proportionality, because it tended to blur the clear-cut principle of distinction and could be abused. Nobody will deny, however, that many attacks in armed conflicts, by whoever conducted, will result in losses, injury and damage to civilians and civilian objects. The view prevailed that it was preferable that the law should reflect this reality and be used to enjoin restraint, rather than be silent on the matter and leave it entirely to the practice of belligerents.

H. Protection of the Environment

Article 35 paragraph 3 lays down as one basic rule regarding methods and means of warfare, i.e., that "it is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment”.

In Article 55, coming within the chapter on protection of civilian objects, the general rule is elaborated and adapted to the particular context.

> "Care shall be taken in warfare to protect the natural environment against widespread long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the civilian population".

The background to these provisions was the widespread environmental destruction which was brought about during the Indochina war through the use of herbicides, bulldozers and extensive bombardment. In the public debate some of these means and methods of warfare were denounced as producing "ecocide", and a ban on "environmental- warfare was urged. Although the ICRC had not tabled any proposal on this matter, amendments were submitted to fill the gap and a special working group submitted two texts which were subsequently amended and accepted as the provisions quoted above.[28]

It is evident that armed action will usually harm the natural environment. Forests and fields may be "craterized", oil may leak into the water table, etc. Many such effects will inevitably be incidental to attacks on military objectives. Quite another thing is action purposely designed to damage the natural environment of the enemy. The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, signed in Geneva in 1977 was drawn up to guard against such intentional use of non-conventional methods damaging the environment.

The Articles in the Geneva Protocol are devised primarily to protect against conventional means and methods of action affecting the environment. But they are not limited to actions which are intended to damage the environment. The articles also cover means and methods which "may be expected" to cause such damage. Hence, if the foreseeable environmental damage is of the kind described in the articles, the means or method will stand condemned, even though the damage may have been incidental to attacks upon legitimate military objectives.

Since most armed action will cause some environmental damage, it was evidently necessary to find a wording limiting the scope of the ban. The working group proposed that the decisive criterion be "the stability of the ecosystems". This phrase, which was possibly deemed not altogether explicit by a conference of legal and military experts, was discarded and replaced by the expression "wide-spread, long-term and severe damage". All three criteria must be present for the ban to be applicable to a means or method of warfare. In Article 35 paragraph 3 such means and methods are banned generally. In Article 55 this ban is related to the harm which might be caused to the health or survival of the population.

This is not, however, an additional condition for application of the prohibition, but rather an illustration of the seriousness of the damage contemplated by the article.

Notes

[1] Rules Concerning the Control of Wireless Telegraphy in Time of War and Air Warfare fixed by the Commission of Jurists entrusted with studying and reporting on this revision of the laws of war, assembled at The Hague on December 11, 1922, *Cf. Recueil general des lois et coutumes de la guerre terrstre. maritime. sous-marine et aerienne*, Documents recueillis et annotes par Deltenre M. Marcel, Bruxe1les, Les Editions Fred We1lens-Pay, 1943, pp. 818-848; *The Laws of Armed Conflicts*. A Collection of Conventions. Resolutions and Other Documents, Edited by D. Schindler and J. Toman, 3rd edition, Dordrecht, Martinus Nijhoff Publishers, Geneva, Henry Dunant Institute, 1988, pp.207-217.

[2] Kalshoven Frits, *The Law of Warfare. A summary of its recent history and trends in development*, Leiden, A.W. Sijthoff, 1973, p. 28.

[3] Conference of Government Experts on the Use of Certain Conventional Weapons. Lucerne, 24.9-18.10.1974. Report. Geneva. ICRC, 1975, pp. 8-9.

[4] Roblee Paul A., 'The legitimacy of modern conventional weaponary', *Military Law Review* (Charlot-tesvi1le), VoI. 71, Winter 1976, p. 148.

[5] Department of the Army Field Manual FM 27-10, *The Law of Land Warfare*, Washington D.C., Department of the Army, July 1956, Par. 34, p. 18.

[6] Canada, Sweden, United Kingdom, United States.

[7] See the statements at the 39th Plenary session of the Geneva Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts of 1977, Doc. CDDH/SR. 39.

[8] See also Roblee Paul, *loc. cit*., pp. 108-109.

[9] Conference of Government Experts on the Use of Certain Conventional Weapons. Lucerne, 24.9-18.10.1974. *Report* Geneva, ICRC, 1975, para. 34, p. II.

[10] United Nations Conference on Prohibitions or Restrictions of Use of Certain Conventional Weapons Which May Be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, Geneva 10- 28 September 1979.15 September- 10 October 1980, *Final report of the Conference to the General Assembly*, A/CONF.95/15, 27 October 1980, Annex I; *The Laws of Armed Conflicts. A Collection of Conventions. Resolutions and Other Documents*, Edited by D. Schindler and J. Toman, 3rd edition, Dordrecht, Martinus Nijhoff Publishers, Geneva. Henry Dunant Institute, 1988, pp. 179-196.

[11] Sandoz, Yves, A new step forward in international law: Prohibition and restriction on the use of certain conventional weapons. *International Review of the Red Cross*, No.220, January-February 1981, p. II.

[12] See Report of Committee III of the Geneva Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts of 1977, Doc. CDDH/50, 28 March 1974, par. 21, CDDH/III/SR. 4, 13 March 1974 and CDDH/III/SR. II, 21 March 1974.

[13] See 1974 Report of Committee III of the Geneva Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts of 1977, CDDH/50 rev. l, par. 46, 2 September 1974. 1974 discussions in Committee III, Doc. CDDH/III/SR.I-12, 1975, Report of Committee III, Doc. CDDH/215/Rev. I, par. 51.
[14] Mudge, G.A., 'Starvation as a Means of Warfare', *The International Lawyer* (Chicago), Vol. 4, 1970, pp. 228-268; Rosenblad Esbjorn, 'Starvation as a Method of Warfare. Conditions for Regulation by Convention', *The International Lawyer* (Chicago) Vol. 7, No.2, 1973, pp. 252-270, Mayer Jean, 'Starvation as a Weapon', in CBW: *Chemical and Biological Warfare, London Conference on CBW*, Ed. by Steven Rose, London, 1968, pp. 76-84.
[15] See p. 149-150.
[16] See Report to the Third Committee on the work of the working group submitted by the Rapporteur, Doc. CDDH/IlI/264/rev.l, 18 March 1975, par. 3 and the Report of the Committee III, Second session, Doc. CDDH/215/rev.l, 15 December 1975, par. 21.
[17] lbid.
[18] See the statements of the representatives of Canada, the Federal Republic of Germany, Italy and the United Kingdom explaining their votes in the plenary meeting, Doc. CDDH/SR.41 paras. 119 and 122, p. 179 and p. 187.
[19] International Committee of the Red Cross, Draft Additional Protocols to the Geneva Conventions of August 12, 1949, Commentary, Doc. CDDH/3, Geneva, ICRC, October 1973, p. 2.
[20] See Report to the Third Committee on the work of the working group submitted by the Rapporteur (Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts, Geneva, 1974-1977), Doc. CDDH/llI/264/rev.1 of 18 March 1975 and CDDH/III/224 of 24 February 1975.
[21] Doc. CDDH/SR.41, annex par. 7.
[22] BMVg. ZDv 15/10 -Kriegsvolkerrecht -Leitfaden fur den Unterricht (Teil 7): A1Iegemeine Bestimmungen des Kriegsf Uhrungsrechts und Landkriegsrecht (Lehrschrift), 1961, par. 68.
[23] Brazil, Canada, Federal Republic of Germany and Nicaragua, Doc. CDDH/III/27.
[24] Australia, Doc. CDDH/III/43, rev.l.
[25] United Kingdom representative at the plenary meeting of 26 May 1977, Doc. CDDH/SR/41.
[26] See Report of the Third Committee (Diplomatic Conference), Doc. CDDH/215/rev. I of the 15 December 1975, para. 98.
[27] lbid.
[28] Doc. CDDH/III/GT/35, Ilth March 1975.

HUMANITY FOR ALL THE INTERNATIONAL RED CROSS AND RED CRESCENT MOVEMENT

HENRY DUNANT INSTITUTE HAUPT

Contents

A. Rules on limits to warfare

Lieber's work heralded two momentous developments. First, it set a precedent for subsequent military handbooks and instructions on the law of war. Secondly, it marked the starting point for the second series of developments in modern international humanitarian law. which saw the emergence of rules on the conduct of war itself. The first evidence of this was a short agreement, the 1868 Declaration of St. Petersburg, which prohibited the use of projectiles weighing less than 400 grammes.[1] The Conference convened by the Russian Tsar in St. Petersburg was able, without fuss, to prohibit the use of a certain type of ammunition in view of the fact that such projectiles uselessly aggravated the suffering of disabled men or rendered their death inevitable. Since the purpose of military operations, i.e. to disable the greatest number of enemy soldiers, does not require the infliction of such horrendous wounds, the diplomatic representatives were able to agree on the prohibition of the use of this type of projectile.

The St. Petersburg Declaration, as it is usually referred to, is important today not so much because of the actual prohibition as because of the considerations which resulted in that prohibition. As is explained in the Preamble, "the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy" .In eliminating the possibility of total war, the St. Petersburg Declaration lends added strength to the above-mentioned principle of the law of war , namely that the belligerents are obliged to limit the use of force in meeting a (legitimate) military objective.

Both Hague Peace Conferences which took place at the turn of the century then attempted to set broader international legal limits to means and methods .of warfare. The most important result was the Hague Convention No. IV of 18 October 1907 respecting the Laws and Customs of War on Land, and the annexed Hague Regulations. This Convention has a long history , shared by the Lieber Code, the St. Petersburg Declaration, the 1874 Brussels Declaration, the Oxford Manual drafted in part by Gustave Moynier and published in 1880, and the Convention worked out by the first Hague Peace Conference in 1899.[2] The Hague Regulations respecting the Laws and Customs of War on Land codified the law of war and contains in particular rules on the treatment of prisoners of war, on the conduct of military operations -with an especially important chapter on the "Means of Injuring the Enemy, Sieges and Bombardments" -and on occupied territory.

[1]Declaration of St. Petersburg of 1868 to the Effect of Prohibiting the Use of Certain Projectiles in Wartime, Schindler/ Toman, No.9.
[2]For the texts see Schindler/Toman.

The preambular paragraphs to Hague Convention No. IV contain one sentence which alone makes that treaty one of signal importance. The Martens Clause, so called after the Russian representative, stipulates that in cases not covered by the rules of law, "the inhabitants and belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established by civilized peoples, from the laws of humanity , and the dictates of public conscience". The *Martens Clause* constitutes a "legal safety-net" .Where there are loopholes in the rules of positive law, says the Martens Clause, then a solution based on basic humanitarian principles must be found.

The Regulations on the Laws and Customs of War on Land had to stand the test of two world wars. In its judgment of the major Nazi war criminals, the Nuremberg Tribunal considered that these Regulations had become part of international customary law and were therefore binding on all States.[3] This remains true to this day.

The topics dealt with in the Hague Regulations were subsequently developed to varying degrees. The chapter on prisoners of war was taken up, as has already been mentioned, in the 1929 Geneva Convention, whereas the Fourth 1949 Geneva Convention developed the legal rules pertaining to occupied territory .The actual law of the conduct of hostilities was taken up in Additional Protocol I of 1977.

The Second Hague Peace Conference also examined war at sea and adopted several conventions on different aspects of the law of war at sea. They were and in some cases still are the source of the law applicable to the conduct of war at sea, the customary rules of which continue to evolve[4]. The Conference also went a step further than the St. Petersburg Declaration and prohibited certain types of weapons and munitions. Most importantly, however, a conference convened by the League of Nations in 1925 adopted *the Protocol prohibiting the use of poisonous gases and bacteriological methods of warfare*. The prohibition of the use of poisonous gases in particular, which has become a rule of customary international law and is therefore binding on all States, has been an important factor in the struggle to ban inhumane weapons. At present, a comprehensive treaty on chemical weapons prohibits not only their use but also their development, production and stockpiling[5]
We have examined the separate development of the laws of Geneva and of The Hague up to the major revision of international humanitarian law which took place subsequent to the disaster of the Second World War. Let us now go on to the later developments.

B. General limitations on the conduct of war

The waging of total war, as we have said, cannot be reconciled with international law. Although under the UN Charter a State is permitted to offer armed resistance (e.g., in legitimate self -defence) , the conduct of war is at all times subject to the general principles of international humanitarian law as expressed by customary law and to international treaty law. In this context, it is worthwhile to recall the 1868 Declaration of St. Petersburg, which

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[3]Trial of the Major War Criminals Before the *International Military Tribunal*, Nuremberg,Vol. XXII, p. 497.
[4]The law of war at sea is not discussed here. See D. P. O'Connell, *The Influence of Law on Sea Power,* Manchester, 1975; Yoram Dinstein, "Sea Warfare", in Bernhardt (ed.), *Encyclopedia of Public International Law,* 1982, Vol. 4, pp. 201-212.
[5]Geneva Protocol of 17 June 1925 for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and of Bacteriological Methods of Warfare ; and the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, of 13 January 1993

presents in its preamble a complete programme for the law relating to the conduct of hostilities.[6] It runs as follows:

> "Considering
>
> That the progress of civilization should have the effect of alleviating as much as possible the calamities of war;
> That the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy;
> That for this purpose it is sufficient to disable the greatest possible number of men;
> That this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable;
> That the employment of such arms would, therefore, be contrary to the laws of humanity; ..."

The St. Petersburg Declaration -together with the Lieber Code -was the first of a series of measures codifying the limits on the conduct of hostilities.

Essentially, these were the Hague Conventions of 1899 and 1907, in particular Convention (IV) *respecting the Laws and Customs of War on Land*, dated 18 October 1907, with the accompanying *Regulations*, which -are especially significant in this context. Article 22 of those Regulations contains the following clause:

> "The right of belligerents to adopt means of injuring the enemy is not unlimited".

It has been pointed out that the Hague Regulations were the main legal criteria for assessing the conduct of hostilities during both world wars. The Nuremberg Tribunal stated that the content of those Regulations was part of international customary law and consequently binding on all belligerent States.[7]

When international humanitarian law was completely revised after the Second World War, only a small number of provisions directly affecting the conduct of hostilities was included in the Geneva Conventions of 12 August 1949. Those provisions are to be found in Part II of the Fourth Geneva Convention, under the title "General Protection of Populations against certain Consequences of War", and deal, for example, with the establishment of safety zones and the protection of civilian hospitals.

With its 1956 *Draft Rules for the Limitation of the Dangers Incurred by the Civilian Population in Time of War*,[8] the ICRC drew the attention of world opinion to the importance of rules which set limits to war itself. However, the ICRC's attempt to draw up a new convention proved to be premature, the major powers showing little understanding for the project. The ICRC's efforts nevertheless served to start a process which led in the first instance to the unanimous adoption by the UN General Assembly of a resolution that would prove to be decisive for the further development of international humanitarian law, namely

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[6] See footnote 14.
[7] See footnote 16.
[8] Second version (1958), in Schindler/Toman. No.28.

Resolution 2444 (XXIII) of 19 December 1968, entitled "Respect for Human Rights in Armed Conflicts ".[9]

The resolution, following on one adopted by the Twentieth International Conference of the Red Cross in Vienna in 1965,[10] confirmed three essential principles of international humanitarian law which, as stated in the text, must be observed by all governments or other groups involved in armed conflict. The three principles may be summarized thus:

- the right of the parties to the conflict to adopt means of injuring the enemy is not unlimited;
- it is prohibited to launch attacks against the civilian population as such;
- a distinction must be made at all times between persons taking part in the hostilities and members of the civilian population, to the effect that the latter be spared as much as possible.

The unopposed confirmation of these three principles by the United Nations laid the groundwork for the development of international humanitarian law by the Diplomatic Conference of 1974-1977. Protocol I, relating to international armed conflicts, and Protocol II, relating to non-international armed conflicts, in fact translated the three principles into detailed directives and prohibitions. As general rules of customary international law, however, they can claim further validity, in particular also in respect of States that have not ratified the Additional Protocols.

The resolution of the International Conference of the Red Cross that served as the model for UN Resolution 2444 also contained a fourth rule, which in the opinion of the major powers would have resulted in the prohibition of the use of nuclear weapons. Since the UN General Assembly did not take over this fourth rule, the obvious conclusion is that States were not willing to deal with the "nuclear question" in connection with international humanitarian law. This observation is of particular significance in the context of the discussion on the scope of Protocol 1.[11]

The development of international humanitarian law gave rise to a further principle, to be set alongside the three basic rules contained in Resolution 2444: the justly famous Martens Clause. It first appeared in the preamble to the Hague Convention (IV) respecting the Laws and Customs of War on Land, and in 1977 was worded as follows in Article 1, paragraph 2 of Protocol I:

> "In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience" .

This clause testifies to the completeness of humanitarian protection: in the absence of an explicit rule for a certain type of conduct, it may not be assumed that such conduct is permitted. On the contrary , a solution must be found that, like international humanitarian law in general, meets the requirements of humane behaviour .

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[9] Schindler/Toman, No.31.
[10] Resolution XXVIII, in *International Review of the Red Cross*, 1965, pp. 588-590
[11] See below, Section 4. C. c.

If the law of the conduct of war were to be summed up in a single word, then that word would be "limits", the limits to which the use of force is subject. As the antithesis of unlimited, the idea of limits precludes the notion of total war .

Some of the limits in question are described in greater detail below. We shall start with the extremely important restriction arising from the definition of those taking part in military operations, i.e. , those who, under the law of war, are permitted to use force against persons and objects. We refer, of course, to combatants.

C. Limits on the choice of methods and means of warfare

Article 35 of Protocol I reinforces a principle of the law of armed conflicts that has already been mentioned and states:

"In any armed conflict, the right of the Parties to the conflict to choose methods and means of warfare is not unlimited" .

This basic rule is supplemented as follows:

"It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering" .

Article 35 adds a new prohibition as a general limitation on warfare:
"It is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment" ..

The three prohibitions are generally worded. On their own, they are insufficient to combatants as binding directives on what they are and are not permitted to do. More specific commands can be derived from these sources by two different ways: first, the treaties themselves contain a number of specific and carefully defined prohibitions, some of which we shall examine more closely. Secondly, the above-mentioned basic rules give form to an auxiliary rule, the principle of proportionality, that in the absence of any special norm, helps to provide practical directives.

According to the principle of proportionality, the use of force and the resulting destruction must not be disproportionate to the objective and to the military advantage sought. You don't shoot sparrows with cannonballs. Any taking of life or destruction of goods that is superfluous, i.e. , that is not necessary to achieve the -lawful -military objective, must be eschewed. The principle of proportionality as found in the law of war is in no way an unfamiliar element, but a general principle of law that should guide any action by States. It is at all events a requirement that can be justified also in military terms, since it expresses the need to concentrate resources. The potential for destruction must be realized only where it is necessary from a military standpoint, and even then only to the extent to which it cannot be avoided. The bombing of a peaceful village of no military importance is also an unjustifiable squandering of *materiel* and ammunition.

a. Prohibited methods of combat

Among the general limitations traditionally set by the law of war we should first recall the idea of chivalry .This embodies the respect shown by fighting men to their opponents as human beings. In so far as they recognize fellow human beings on the other side, they forego particularly cruel forms of attack and weapons. thus avoiding excessive suffering. Since such excessive suffering is never essential to attaining the given objective, chivalry in combat does not run counter to any compelling military considerations. Chivalrous conduct is compatible with the requirements of warfare.

Forbidden methods of combat include above all perfidy. Perfidy is defined as ""acts inviting the confidence of an adversary to lead him to believe that he is entitled to. or is obliged to accord, protection under the rules of international law applicable in armed conflict, with intent to betray that confidence".[12] Examples are attacks made under the protection of the white flag, or the feigning of incapacitation to fight, in order more easily to eliminate an adversary in the act of bringing assistance. On the other hand, simple ruses of war intended to mislead an adversary are naturally not prohibited. Examples of ruses are camouflage, mock operations and misinformation.

Protocol I contains a special rule forbidding the misuse, in military operations, of recognized distinctive emblems. in particular the red cross or red crescent.[13] Misuse of the emblem is reprehensible, not only because an individual member of the enemy armed forces may be adversely affected, but also because such conduct generally destroys confidence in the emblem. The risk is that even legitimate use of the emblem will no longer be respected. For this reason, the perfidious use of the distinctive emblem is, in certain circumstances, a grave breach of Protocol I, that is, a war crime.[14] The same provisions also forbid misuse of the United Nations emblem, the perfidious use of which is likewise punishable.

It is also prohibited in all circumstances "to order that there shall be no survivors" or to conduct hostilities on this basis (to give no quarter).[15] Those who are hors de combat may not be attacked and their lives must be spared. as explicitly stated in another provision in the section of Protocol I relating to methods and means of warfare.[16] The killing of an enemy soldier who has recognizably ceased to fight is murder. In the same line of thought, Protocol I prohibits attacks on crew members parachuting from an aircraft in distress, since they are unable to defend themselves in that situation.[17] A different case is that of airborne troops dropped by parachute: they may be attacked while in the air .

The various prohibitions make clear that certain forms of conduct are so reprehensible that they may not be used against an enemy soldier (who may of course be combatted). Furthermore, members of armed forces are prohibited to attack protected persons, e.g., civilians or prisoners, or protected objects (such as hospitals), as we have already shown in the section relating to Geneva law.

b. Prohibited weapons

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[12] Protocol I, Article 37
[13] Article 38.
[14] Article 85.3 (f)
[15] Article 40
[16] Article 41
[17] Article 42

The law of war also prohibits a number of weapons and types of ammunition, or restricts their use. Protocol I, for example, forbids attacks with weapons or ammunition which have indiscriminate effects.[18] This means that arms or ammunition are prohibited which strike military objectives and civilians or civilian objects without distinction, because they can in any case not be accurately directed against a military target (e.g. , a missile that cannot be accurately guided) .

It is always prohibited to employ weapons or projectiles "of a nature to cause superfluous injury or unnecessary suffering".[19] This rule is frequently misunderstood, even represented as cynical, since, it is said, all suffering is unnecessary .That is of course correct: war in itself is cruel. The rule, however, stipulates something different: it forbids the use of weapons and ammunition that cause injuries that are not essential to attain the military objective, i.e. , are superfluous. Since the objective can be attained through other, less cruel means, such injuries would be disproportionate. It is in this sense that the Declaration of St. Petersburg (1868) prohibits the use of explosive or flammable ammunition, and the First Peace Conference of The Hague (1899) declared the use of "dum-dum" bullets and of poison and poisoned weapons to be illegal.

The Second Peace Conference of The Hague adopted in 1907 limitations applying to war at sea, especially concerning the laying of mines. [20] These provisions prohibit free-floating mines, unless they self-destruct within one hour of their control being lost; the same rule applies to moored mines that break loose. Torpedoes that miss their mark must also become harmless.

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[18] Protocol I, Article 51(4)
[19] Protocol I, Article 35 (2)
[20] Hague Convention (VIII) Relative to the Laying of Automatic Submarine Contact Mines.

The Relationship between International Humanitarian Law and Arms Control

ROBERT J. MATHEWS AND TIMOTHY L.H. McCORMACK

Contents

1. INTRODUCTION

The notion of legal constraint upon the waging of war is as old as the earliest extant history of the conduct of war. From Sun Tzu's *The Art of War*, written in 5th Century BC (China), throughout every subsequent stage of human history and in every major human civilisation, warriors were subject to specified limitations on the means and methods of warfare and, in many cases, were subject to legal sanction for violations of those limitations.[1] Restrictions on the means and methods of warfare have consistently included prohibitions on, or regulation of, the use of particular weapons. For example, the use of poison and poisoned weapons was prohibited in ancient Hindu law and by the Greeks and Romans,[2] and the use of the arbalest (crossbow) was prohibited by the Lateran Council in the Middle Ages.[3] It is hardly surprising then, that from the early development of the international law of war in the mid-Nineteenth Century, efforts to reach multilateral agreement to regulate the conduct of war would include attempts to prohibit or restrict the use of particular weapons. To this extent, there is a clear correlation between international humanitarian law and arms control.

International humanitarian law is concerned with the legal regulation of the conduct of armed conflict and is limited in its application to the existence of an armed conflict. Consequently, the primary focus in relation to weapons of war has been on their use in armed conflict and the regulation has not extended to the use of weapons in circumstances short of armed conflict let alone to their development, possession or transfer in circumstances other than armed conflict. Humanitarian concerns for victims of armed conflict in relation to the deployment of weapons has either involved prohibitions on the use of certain specific weapons or restrictions upon the manner of deployment of other weapons types.[4]

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[1] See, eg, Geoffrey Best, *Humanity in Warfare* (1980); Christopher Greenwood, 'Historical Development and Legal Basis' in D Fleck (ed), *The Handbook of Humanitarian Law in Armed Conflicts* (1995); Timothy L H McCormack, 'From Sun Tzu to the Sixth Committee: The Evolution of an International Criminal Law Regime' in Timothy LH McCormack and Gerry J Simpson (eds) *The Law of War Crimes: National and International Approaches* (1997)31.

[2] Joseph Kelly, *'Gas Warfare in International Law'* (1960) 9 Military Law Review 1, 3-5.

[3] Captain Paul A Roblee, 'The Legitimacy of Modem Conventional Weaponry' (1976) 71 *Military Law Review* 95, 99.

[4] These two aspects of the approach of international humanitarian law to specific categories of weapons is captured in the title of the *1980 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects and Protocols I-*

By contrast, the negotiation of arms control and disarmament treaty regimes have been motivated primarily by national and international security concerns and not necessarily by humanitarian concerns. The focus of arms control regimes has ranged from: limiting the stockpiles of a certain weapon type; through reductions in stockpiles to the comprehensive prohibition of weapons types, including prohibitions on the development, production, stockpiling, testing and transfer, as well as the destruction of existing stockpiles, of weapons. Often arms control regimes also include one or more of a range of associated verification or compliance monitoring activities. The scope of application of arms control regimes is, thus, much broader than that for international humanitarian law.

The purpose of this chapter is to examine the relationship between international humanitarian law and the international law of arms control to explore the areas of interaction, to understand the influence of humanitarian principles on the negotiation of arms control regimes and to expose the possible weaknesses inherent in a naive and exclusive humanitarian approach to the topic of arms control.

2. INTERNATIONAL HUMANITARIAN LAW AND THE REGULATION OF WEAPONS

International humanitarian law purports to regulate the conduct of armed conflict in two key respects: (1) by imposing minimum standards of protection 'for victims of armed conflict, whether they be injured combatants, prisoners of war, or civilians who happen to be caught up in the conduct of armed hostility;[5] and (2) by restricting the permissible means and methods of warfare, including the types of weapons that can be deployed, targets that they

III, opened for signature 10 October 1980, 1342 UNTS 137; 19 ILM 1523 (entered into force 2 December 1983) ('*1980 Certain Conventional Weapons Convention*'). As at 17 March 1999, there were 73 States Parties.

[5] So-called 'Geneva Law' because the principal instruments dealing with this aspect of international humanitarian law were negotiated and adopted in Geneva. Most notably, these instruments include the Four Geneva Conventions of 1949: *Geneva Convention for the Amelioration of the Condition of the Wounded and the Sick in Armed Forces in the Field, 75 UNTS 31 ('First Geneva Convention'); Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea*, 75 UNTS 85 ('*Second Geneva Convention*'); *Geneva Convention Relative to the Treatment of Prisoners of War*, 75 UNTS 135 ('*Third Geneva Convention*'); *Geneva Convention Relative to the Protection of Civilian Persons in Time of War*, 75 UNTS 287 ('*Fourth Geneva Convention*'). All these Conventions entered into force on 21 October 1950, and as at 17 March 1999, there were 188 States Parties. See also the two Additional Protocols of 1977; *Protocol Additional to the Geneva Convention of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflict*, 1125 UNTS 3; 16 ILM 1391 (entered into force 7 December 1978) ('*Additional Protocol I*'), as at 17 March 1999, there were 153 States Parties; and *Protocol Additional to the Geneva Convention of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts*, 1125 UNTS 609; 16 ILM 1442 (entered into force on 7 December 1978) ('*Additional Protocol II*'), as at 22 October 1998, there were 145 States Parties. However, these principal instruments were preceded by a succession of other conventions dealing with protection for victims of armed conflict including: *the 1864 Convention for the Amelioration of the Condition of the Wounded in Armies in the Field, opened for signature 22 August 1864*, 55 BSFP 43; (1907) 1 *American Journal of International Law* (Supp) 90 (entered into force 22 June 1865); the 1906 *Convention for the Amelioration of the Condition of the Wounded in Armies in the Field*, opened for signature 6 July 1906, GBTS 15 (1907), Cd 3502; (1907) 1 *American Journal of International Law* (Supp) 201 (entered into force 9 August 1907) ('*1906 Hague Convention*'); *the 1929 Convention for the Amelioration of the Condition of the Wounded and Sick in Annies in the Field*, opened for signature 27 July 1929, 118 LNTS 303; (1933) 27 *American Journal of International Law* (Supp) 43 (entered into force 19 June 1931) ('*1929 Hague Convention*'); and, *the 1929 Convention Relative to the Treatment of Prisoners of War,* opened for signature 27 July 1929, 118 LNTS 343; (1933) 27 *American Journal of International Law* (Supp 59)) (entered into force 19 June 1931) ('1929 POW Convention.).

can be deployed against and limitations on the amount of force used proportionate to the legitimate military necessity.[6] While the popular nomenclature for distinguishing these two aspects of international humanitarian law ('Geneva Law' and 'Hague Law'), on the basis of the city in which the negotiations for the principal relevant, instruments took place, is overly simplistic,[7] the distinction itself is valid. In this chapter we are concerned with the second of these two aspects of international humanitarian law -particularly with the regulation of specific weapons types.

2.1 *Early Development of]nternational Humanitarian Law Principles*

The origins of contemporary international humanitarian laws are often traced to 1859 and Henri Dunant's experiences in the aftermath of the Battle of Solferino Dunant successfully used his observations, recorded in his book Souvenir de Solferino,[8] to push for the establishment of voluntary 'relief societies for the purpose of having care given to the wounded in wartime by zealous, devoted and thoroughly qualified volunteers'[9] (which became known as the International Committee of the Red Cross) for the relief of victims of war and for the adoption of a binding legal instrument enumerating minimum standards of protection for victims of war.[10] Although the thrust of Dunant's energy was in the area of protection and relief for the victims of war, he was also well aware of the importance of controlling the deployment of specific weapons. Dunant's concluding paragraph to *Souvenir de Solferino* shows great prescience on his part:

> If the new and frightful weapons of destruction which are now at the disposal of the nations, seem destined to have bridged the duration of future wars, it appears likely, on the other hand, that future battles will only become more and more murderous. Moreover, in this age when surprise plays so important a part, is it not possible that wars may arise, from one quarter or another, in the most sudden and unexpected fashion? And do not these considerations alone constitute more than adequate reason for taking precautions against surprise?

As early as 1868, just a few years after the creation of the International Committee of the Red Cross, following Henri Dunant's successful endeavours in Europe, the international community agreed to the Declaration of St. Petersburg.[11] The Declaration was adopted as a result of an initiative of the Russian Czar, Alexander ll, who was concerned about the

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[6] So-called 'Hague Law' because the principal instruments regulating the means and methods of warfare are the Declarations and Conventions from the two Hague Peace Conferences of 1899 and 1907: see *Final Act of the International Peace Conference*, opened for signature 29 July 1899, 91 BFSP 963; (1898-1899) 1 *American Journal of International Law* (Supp) 103 ('1899 Final Act'); *Convention Concerning the Laws and Customs of War on Land*, opened for signature 18 October 1907, 205 CTS 277; (1908) 2 *American Journal of International Law* (Supp 90) (entered into force 26 January 1910) (*'1907 Hague Convention IV'*). The Regulations are Annexed to the Convention.

[7] Louise Doswald-Beck, 'International Humanitarian Law and the Advisory Opinion of the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons' (1997) 316 *International Review of the Red Cross* 35, 36.

[8] Henri Dunant, Un Souvenir de Solferino (1862). All references in the present work are to the translation *A Memory of Solferino* (1986), the original of which was published by the American National Red Cross in 1939.

[9] Ibid 115.

[10] Ibid 128.

[11] *Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight*, opened for signature 29 November 1868, 138 CTS 297; (1907) 1 *American Journal of International Law (Supp)* 95 (entered into force 11 December 1868) (*'Declaration of St Petersburg'*).

development of an anti-personnel explosive bullet. The Declaration of St. Petersburg is important for two reasons. First, it incorporates a prohibition of a specific type of weapon -in this particular case a projectile of weight below 400 grams, which is either explosive or charged with fulminating or inflammable substances. That in itself represents a significant achievement of the late Nineteenth Century. But the Declaration does more than simply attempt to impose a restriction on a specific weapon type.

Second, and perhaps more importantly, the Declaration offers a principled rationale for the specific prohibition. The Preamble to the Declaration, which may well be better known than the operative text itself, states that:

> [The] Commission having by common agreement fixed the technical limits at which the necessities of war ought to yield to the requirements of humanity...declare as follows:
>
> Considering that the progress of civilization should have the effect of alleviating as much as possible the calamities of war;
>
> That the only legitimate object which States should endeavour to accomplish during war is to weaken the military forces of the enemy; That for this purpose it is sufficient to disable the greatest possible number of men;
>
> That this object would be exceeded by the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable;
>
> That the employment of such arms would, therefore, be contrary to the laws of humanity.

The significance of the Preamble is its reaffirmation of the existence of binding limitations to the means and methods of warfare -that on the basis of a commitment to apply the "Laws of Humanity" the international community, as it existed in 1868, considered itself obligated to prohibit a specific type of weapon.

While these two positive aspects of the Declaration deserve emphasis, some additional comments are also valid. At least one of the parties to the negotiations for the Declaration, Prussia, argued for a more general enquiry .into 'the application of scientific discoveries to armed conflict' with a view to agreement on a broader prohibition than the one originally envisaged. That suggestion was vigorously and successfully opposed. All that the negotiating parties were prepared to accept was a paragraph which stated that:

> The Contracting or Acceding Parties reserve to themselves to come hereafter to an understanding whenever a precise proposition shall be drawn up in view of future improvements which science may effect in the armament of troops, in order to maintain the principles which they have established, and to conciliate the necessities of war with the laws of humanity.

Furthermore, the wording of the prohibition itself is narrow and limited the prohibition only extends to the use of the projectiles in war between— contracting parties and is, therefore, waived in a war involving a non-party or a war involving parties where a non-party joins one of the belligerents.

The tensions inherent in the text of the Declaration of St. Petersburg are as evident now as they were in 1868. The international community willingly concedes that the deployment of military force is subject to restriction and to limitation, but jealously guards the right to determine exactly what the limitations are in respect of specific categories of weapon. While States have found it relatively easy to declare their acceptance of the binding nature of general principles, there has always been a gap between the articulation of commitment to the general principles and the effective application of those general principles to specific weapons categories.

The preambular formulation in the St. Petersburg Declaration declaring illegal 'the employment of arms which uselessly aggravate the sufferings of disabled men, or render their death inevitable' was affirmed and applied to additional categories of weapons with the adoption of subsequent instruments. In 1899, for example, Czar Nicholas n initiated a gathering of international political leaders, this time at the First Hague Peace Conference, with the objective of a general limitation on armaments.[12] The Czar was concerned about technological advances in weaponry and saw an international peace conference as a way of facilitating implementation of the general principles articulated in the St. Petersburg Declaration 30 years before. The States participating at the 1899 Conference refused to commit to a general limitation of armaments but did agree to several specific instruments prohibiting the use of, for example, projectiles for the diffusion of asphyxiating or deleterious gases and expanding, or "dum-dum" bullets. It is interesting to note that in the particular instruments dealing with each of these two specific weapons types, the preambles explicitly refer to the inspiration for agreement from the 'sentiments which found expression in the Declaration of St. Petersburg'. Again, though, the prohibitions are narrowed to apply to the use of the weapons in conflicts between States Parties only.

The Final Act of the 1899 Hague Peace Conference proposed a follow-up conference to consider matters on which there had been no agreement.[13] States were invited to a second Hague Peace Conference in 1907 and again failed to reach agreement on a general limitation on armaments. However, there were other significant achievements at the 1907 Conference – most notably Convention IV Respecting the Laws and Customs of War on Land.[14] This convention represented the most comprehensive attempt to codify the international law regulating the means and methods of warfare to date[15] and contained a number of key provisions to regulate the use of weapons. Articles 22-28 dealt with the means and methods of warfare and Article 23(a) prohibited the use of poison and poisoned weapons while Article 23(e) prohibited the use of 'arms, projectiles, or material calculated to cause unnecessary suffering'. In addition, the preamble to the Convention incorporated the celebrated Martens Clause to the effect that:

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[12] Joseph H Choate. *The Two Hague Conferences* (1969); Frederick W Holls, *The Peace Conference at the Hague (1900).*
[13] 1899 Final Act, above n 6.
[14] 1907 Hague Convention IV, above n 6.
[15] Convention IV of 1907 was not the first multilateral treaty regulating the means and methods of warfare. However earlier treaties including the Declaration of St Petersburg of1868 and the various instruments emerging from the 1899 Hague Conference were focused on specific weapons types or specific methods of warfare. Convention IV of 1907 represented a broader codification than earlier instruments.

> Until a more complete code of the laws of war has been issued, the high contracting parties deem it expedient to declare that, in cases not included in the Regulations adopted by them, the inhabitants and the belligerents remain under the protection and the rule of the principles of the law of nations, as they result from the usages established among civilized peoples, from the laws of humanity, and the dictates of the public conscience.

The Martens Clause was considered a particularly significant development because it purported to extend the key principles of the international law of armed conflict to situations not covered by the existing instruments-including, therefore, those conflicts involving non-States-Parties to the various instruments.

2.2 *Contemporary General Principles of International Humanitarian Law*

In addition to the Martens Clause of 1907, there are two key general principles of customary international humanitarian law which limit the deployment of weapons, both of which are now codified in Protocol I Additional to the Geneva Conventions of 1949. The first of these two principles is a reiteration of the general prohibition first referred to in the Declaration of St. Petersburg: the prohibition on the deployment of weapons which 'cause superfluous injury or unnecessary suffering'.[16] This is a problematic formulation because the legal prohibition on the causing of 'superfluous injury or unnecessary suffering' has never been defined. The international community has simply characterised some weapons as "abhorrent" without ever articulating criteria for that determination.[17] International humanitarian law accepts the general proposition that force can be deployed for legitimate military objectives determined on the basis of the notion of military necessity.The deployment of military force, including the choice of particular weapons, must be limited to causing no more suffering than is necessary to achieve the legitimate military objective.

As we have seen, at various stages since 1868, the international community has been able to agree that certain weapons types fall within this general prohibition against weapons which cause superfluous injury and unnecessary suffering. However, despite virtually universal agreement on the relevance and application of the principle that weapons which cause superfluous injury and unnecessary suffering are prohibited, the only weapons types which have actually been prohibited are those which have been subjected to specifically agreed prohibitions. In other words, the existence of the general prohibition itself has never resulted in the prohibition of a specific weapons type.[18] The inconsistency of approach by the international community to the negotiation of treaty prohibitions of certain weapons but not others leads to the conclusion that humanitarian principles, while somewhat influential, are rarely, if ever, determinative of outcomes in arms control negotiations.

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[16] Additional Protocol I, art 35(2).

[17] 17 Robin M Coupland (ed), The SIrUS Project: Towards a Determination of Which Weapons Cause 'Supefluous Injury' or Unnecessary Suffering' (1997), reproduced in this volume as Chapter 5.

[18] It will be shown that at the Rome Diplomatic Conference to Establish an International Criminal Court the international community agreed to an unprecedented nexus between this general principle and a negotiated multilateral treaty prohibition of a specific category of weapons as a precondition for the exercise of the subject matter jurisdiction of the International Criminal Court. The negotiation of this new position supports the view that the international community is unwilling to accept the general prohibition as a 'stand alone' principle in the absence of a negotiated treaty prohibition on a specific category of weapons. See, *Rome Statute of the International Criminal Court*, adopted by the United Nations Diplomatic Conference of Plenipotentiaries on the Establishment of an International Criminal Court on 17 July 1998; 37 ILM 1002. The text of the Statute is located at <http://www.un.org/icc/> (Website of the ICC).

All developments in the international legal regulation of weapons prior to World War II focused exclusively on consequences for combatants. In World War II, with new technological developments in weapons, the international community witnessed the relative proportions of military to civilian casualties in armed conflict beginning to change with a much greater incidence of civilian casualties. Consequently, it became imperative to further develop the general principles of international humanitarian law regulating the deployment of weapons. The second of the general principles referred to above is the so-called principle of "distinction": that civilians and non-combatants must be protected from the conflict and are not to be the specific target of the deployment of weapons.[19] Weapons which are incapable of discriminating between military and civilian targets are prohibited, and weapons can only be deployed in a discriminatory manner. This general principle has led to the somewhat euphemistic phrase 'collateral damage' to describe the use or deployment of weapons against a military target which happen to have incidental effects on the civilian population. The international community accepts the general proposition that civilians are not to be the targets of the deployment of weapons, but it is clear from the proportion of civilian casualties in armed conflict that this is often the effect of the deployment of the modern weapons of war. While it may be true that this general principle has had some influence on limiting the number of civilian casualties from armed conflict, the challenge for international humanitarian law clearly is to translate the broad acceptance of a principle in peacetime into one that is fully respected during armed conflict.

Despite the relatively recent development of the principle of distinction, it has readily been accepted by the international community as a "stand alone" principle -including as a general principle the violation of which carries individual criminal culpability.[20] Perhaps the reason for the contrast between attitudes toward the principle of distinction and the prohibition on weapons which cause superfluous injury or unnecessary suffering has to do with the relative certainties in the application of the principle of distinction. There is a well established definition of "civilian" and there are clear instances where civilians or civilian objects are deliberately targeted as the object of attack. These measurables are in stark contrast to the uncertainties in an undefined phrase such as 'superfluous injury or unnecessary suffering'. However, it is also true that the principle of distinction is more often applied to the manner of deployment of particular weapons rather than to the weapons themselves. While the principle can also operate to prohibit weapons which are "inherently indiscriminate", it must be recognised that weapons are inanimate objects and so must be targeted and deployed.[21] To the extent that any particular weapon type can be deployed in a discriminatory manner, it ought not be illegal by reason solely of the application of this general principle. Weapons types can be, and often are, regulated on the basis of specific treaty regimes and it is to arms control regimes we now turn.

3. THE REGULATION OF WEAPONS THROUGH ARMS CONTROL REGIMES

As discussed above, international humanitarian law -the law of armed conflict -includes principles of a humanitarian nature intended to restrict or prohibit the use of specific

[19] See Additional Protocol I, arts 51(4) and (5).

[20] In the Rome Statute for the ICC, for example, any violation of the principle of distinction constitutes a war crime whether committed in an international or non-international armed conflict. Articles 8(2)(b)(i) and (ii) and 8(2)(e)(i) of the Court's Statute now reflect the principle earlier enshrined in art 85(3)(a) of Additional Protocol I.

[21] See Doswald-Beck, above n 7, 39.

weapons. The weapon types include those that are deemed to exert their effects indiscriminately or cause superfluous injury or unnecessary suffering. Unfortunately, these laws of war have had very limited success in reducing the extent of superfluous injury or unnecessary suffering. As noted by the arms control specialist Jozef Goldblat:

> All laws of war suffer from one common weakness: the rules of conduct established for belligerents in time of peace may not resist the pressure of military expedience generated in the course of hostilities, and the attempts to "humanise" war may sometimes prove futile. The danger that the weapons prohibited may, under certain circumstances, be resorted to-as has occurred on several occasions -will not disappear as long as these weapons remain in the arsenals of states. Hence the intrinsic link between the development of the humanitarian laws of war and progress in the field of disarmament.[22]

Indeed, one could argue that if the principle of distinction or the prohibition on use of weapons which cause superfluous injury or unnecessary suffering had been respected by all belligerents, disarmament and arms control treaties would be less necessary.

Disarmament is the traditional term for the elimination, as well as the limitation or reduction, through negotiation of an international agreement, of the means by which nations wage war. The goal of eliminating war goes far back in history, but in modern times disarmament came into focus with the Hague Conferences in 1899 and 1907. The term "arms control" was coined in the 1950's to denote an international agreement to limit the arms race, in particular, at that time, the nuclear arms race between the USA and the Former Soviet Union (FSU), following recognition that general and complete nuclear disarmament would not be readily achieved.[23] The term "arms control" originally was meant to denote internationally agreed rules limiting the arms competition rather than reversing it; it had a connotation distinct from the reduction of armaments (ie disarmament). Indeed, the term "arms control" was not popular with a number of supporters of disarmament.[24] Subsequently, however, the meaning of the term "arms control" has become significantly broadened,[25] and is now commonly used to denote international agreements which are intended to:

- freeze, limit or abolish specific categories of weapons;
- prevent certain military activities;
- regulate the deployment of forces;
- proscribe the transfers of militarily important items;
- reduce the risk of an accidental war;
- constrain or prohibit the use of certain arms in war; or
- build up confidence among states through greater openness in the military field, and thereby produce an international climate conducive to disarmament.

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[22] Jozef Goldblat, *Agreements for Arms Control: A Critical Survey*, Stockholm International Peace Research Institute (1982) 89.
[23] In fact, in 1973, a Scientific American journal dedicated to Arms Control devoted 376 of its 416 pages to Nuclear Weapons related issues. See Herbert F York, Arms Control', (Readings from *Scientific American*) January 1973.
[24] Alva Myrdal, *The Game of Disarmament* (1977).
[25] Jozef Goldblat, above n 22, xv.

It is in this broad sense that the term "arms control" will be used throughout this chapter. It should be noted that, with this definition, "arms control" includes the complete prohibition of possession of a category of weapons (that is, disarmament has become regarded as a subset of arms control). Likewise, various international agreements (for example, the 1925 Geneva protocol[26]) which were originally regarded as being international humanitarian law agreements, also fall within the "arms control" rubric. As far as its basic purpose is concerned, arms control serves four objectives:[27]

- reducing the likelihood of war, especially by trying to impose limits on the evolution and proliferation of weapons that may destabilise strategic relationships and thus create incentives for preventive attacks;
- reducing the suffering and damage in the event of war;
- reducing the expenditure on armaments and saving resources; and
- contributing to conflict management by providing a framework for negotiation between opposing sides, by reducing suspicion and by generally contributing to an atmosphere conducive to relaxation of tensions.

The weapons that arms control negotiators have attempted to either prohibit or restrict include certain types of weapons that are deemed to exert their effects indiscriminately or cause superfluous injury or unnecessary suffering. Traditional arms control and disarmament has for the most part concentrated on containing the threat caused by the existence of nuclear, chemical and biological weapons. However, within the broad definition already referred to, arms control includes the 1980 Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects[28] which covers a number of specific conventional weapons, as well as the recently concluded 1997 Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction.[29] More recently, international attention has been drawn to the dangers of unregulated trade in conventional weapons, although current responses to these dangers are limited to a voluntary register of the transfer of certain conventional weapons.

In the past, international humanitarian law treaties have been relatively easy to negotiate (because of the limited, if any, implications for national security) compared with arms control treaties. Arms control treaties have generally been more difficult to negotiate because of the need for balanced reductions, verification of compliance (and the associated concerns about loss of national security or other sensitive information). While arms control efforts have met with limited success (seldom meeting the goals set by their more ambitious proponents), recent political events including the collapse of the Soviet Union and the end of the 'Cold War' have provided new opportunities for substantial developments in arms control, including significant reductions in the nuclear and conventional weapons arsenals of the major powers.

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[26] *Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or other Gases and Bacteriological Methods of Warfare,* (opened for signature 17 June 1925), 94 UNTS 65; 26 UST 571) (entered into force 8 February 1928) (*'Geneva Protocol'*).
[27] Daniel Frei, 'International Humanitarian Law and Arms Control' (1988) 267 *International Review of the Red Cross* 491.
[28] See above n 4.
[29] *Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of and on Their Destruction*, opened for signature 18 September 1997, 36 ILM 1507 (entered into force on 1 March 1999) ('The Ottowa Land Mines Convention'). As at 17 March 1999, there were 67 States Parties.

In the remainder of this chapter, we present a series of case studies on specific weapons categories and attempt to analyse the relationship between international humanitarian law principles and other arms control considerations in the negotiations for the specific multilateral treaty regimes which seek to regulate those particular weapons categories. Some attempt is also made to evaluate the effectiveness of various arms control treaties and to consider the proposals for strengthening those regimes.

The Relationship between International Humanitarian Law and Arms Control

ROBERT J. MATHEWS AND TIMOTHY L.H. McCORMACK

Continued……..

Contents

4. CASE STUDIES ON SPECIFIC WEAPONS

4.1 *Chemical Weapons*

As discussed above, the use of poisons and diseases in war, which has been practised since ancient times, was condemned and prohibited in a number of international declarations and treaties, including in the Hague Conventions of 1899 and 1907.[1] However, these humanitarian advances in the development of legal principles regulating the means and methods of warfare failed to prevent the extensive use of some weapons already the subject of specific prohibition in World War I. The use of chemical weapons in World War I was particularly severe with the deployment of approximately 125, 000 tonnes of toxic chemicals resulting in 1, 300, 000 casualties, more than 100, 000 of which were fatal.[2] In an appeal to the belligerents of 6 February 1918, the International Committee of the Red Cross stated that:

> We wish to-day to take a stand against a barbaric innovation...This innovation is the use of asphyxiating and poisonous gas, which will it seems increase to an extent so far undreamed of...We protest with all the force at our command against such warfare which can only be called criminal.[3]

Articles in various peace treaties at the conclusion of the War reiterated, and in some cases extended, the prohibition incorporated in the 1899 Hague Declaration Concerning Asphyxiating Gases.[4] In the immediate aftermath of World War I, chemical weapons were

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[1] For a brief history of the use of poisons and diseases as methods of warfare prior to World War I see Joseph Kelly, above n 2.
[2] United Nations, (1986) 11 *Disarmament Yearbook* 241.
[3] Stockholm International Peace Research Institute, The *Problem of Chemical and Biological Warfare,* Vol IV, 'CB Disarmament Negotiations, 1920-1970' (1974) 41.
[4] *Declaration Prohibiting the Use of Asphyxiating Gases ('Hague Declaration 11')* opened for signature 29 July 1899, 187 CTS 456; (1907) 1 *American Journal of International Law* (Supp) 155 (entered into force 4 September 1900).

described as 'a fundamentally cruel method of carrying on war' and 'criminal' and their deployment against non-combatants was described as 'barbarous and inexcusable'.[5]

In 1920 there were preliminary discussions within the League of Nations on the feasibility of developing a chemical disarmament treaty. However, on the issue of verification of 'non-production' of chemical weapons by chemical industry, it was concluded that 'it would be useless to seek to restrict the use of gases in wartime by prohibiting or limiting their manufacture in peacetime'.[6] So diplomats settled for an easier option based on the principles of international humanitarian law. The International Conference on the Control of the International Trade in Arms, Munitions, and Implements of War, convened in Geneva in 1925 under the auspices of the Council of the League of Nations, adopted the text of the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare.[7] Under the terms of the Protocol, the States Parties 'so far as they are not already Parties to Treaties prohibiting such use' were prohibited from the use in war of 'asphyxiating, poisonous or other gases, all analogous liquids, materials or devices...[and] bacteriological [weapons]'.

The 1925 Geneva Protocol, like most of its contemporary multilateral instruments, represented a mixed achievement. On one hand, the instrument did represent a collective response to the horrors of the use of chemical weapons in World War I and was intended to achieve more than its predecessors in relation to that particular category of weapons. However, the Protocol also suffered from some major limitations. Firstly, it represented a compromise -several States were keen to see agreement on a comprehensive prohibition of chemical weapons but the resultant prohibition only on use was the best that could be achieved. Secondly, the Protocol only prohibited use in warfare and not in conflict situations where war had not formally been declared. Thirdly, many States Parties entered reservations on reciprocal use of chemical weapons so that the Protocol ended up constituting a de facto prohibition on first use in warfare rather than a comprehensive prohibition on any use in warfare. Fourthly, the Protocol contained the common exclusion clause limiting the prohibition to war between States Parties only. As a result of these limitations, the Protocol did not prevent future first use of chemical weapons by States Parties even in wars against only other States Parties.[8]

Even at the time of agreement, there was a view that the 1925 Geneva Protocol was inadequate, that a mere declaration of determination not to have recourse to the prohibited means of warfare might not stand the strain of actual hostilities, and that the envisaged convention on the reduction and limitation of armaments should include more stringent measures. In 1926, a Disarmament Conference (DC) was established by the League of Nations and held several sessions between 1926 and 1930. The expert bodies associated with the DC expressed the view that it would not be practical to verify 'non-production' of chemical weapons by chemical industry because 'preparations for chemical war could not be detected and prevented: chemical factories could be quickly adapted to manufacturing poison

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[5] Stockholm International Peace Research Institute, above n 32, 44.
[6] Ibid.
[7] Opened for signature 17 June 1925, 94 LNTS 65; 14 ILM 49 (entered into force 8 February 1928) ('*1925 Geneva Protocol'*).
[8] For more detailed discussion about the limitations of the 1925 Geneva Protocol see Timothy L H McCormack, 'International Law and the Use of Chemical Weapons in the Gulf War' (1990-1) 21 *California Western International Law Journal* 1, 5-10.

gases; and some of these types of gases are current commercial products of industry'[9]. By 1932, it was accepted, in the light of the technical assessment made for the DC, that no reliable system of verification was possible. Following the withdrawal of Germany from the DC, a decision was taken in early 1936 to postpone further meetings of the DC -it never reconvened.

As already mentioned, chemical weapons have been used at various times since World War I despite the existence of the 1925 Geneva Protocol. The most blatant recent example of this was in the 1980s by Iraq against Iranian soldiers and against Kurds in northern Iraqi villages. In the years since World War I, the military utility of chemical weapons has diminished. States have developed effective protective equipment against chemical weapon attack and other weapons have been developed which are less dependent upon favourable climatic conditions such as wind speed and direction, and the absence of rain. Most States had reached the conclusion that chemical weapons were not indispensable to their strategic military capabilities. Additionally, the Iraqi use of chemical weapons against unprotected civilians demonstrated the dangers of increasing proliferation of chemical weapons. This combination of diminished strategic value and potential proliferation threat facilitated a greater level of multilateral agreement than had been possible hitherto.

An additional factor complemented the congruence of circumstances facilitating the conclusion of a comprehensive treaty ban on chemical weapons. In 1987, the Former Soviet Union (FSU) (following on from the advent of glasnost and *perestroika*) accepted the concept of challenge inspection for verification of compliance with a chemical weapons convention, admitted possession of chemical weapons, and hosted an international meeting of arms control negotiators at one of its chemical weapons facilities. All of these developments would have been inconceivable prior t the improvement in East-West relations in the rnid-1980s.

Negotiation of the Chemical Weapons Convention (CWC)[10] commenced in 1969 in Geneva and was not concluded until 1992. Although this 23 year process was a very slow and tortuous one, it was ultimately rewarding. Unlike the 1925 Geneva Protocol, the CWC requires the complete elimination of chemical weapons (within 10 years of entry into force) and will introduce a verification regime which will provide assurance of compliance by States Parties, but which will not hinder the development of peaceful chemical industry.Verification under the CWC includes compulsory national declarations about relevant industrial and military activities, and a regime of routine inspections of declared industrial and military facilities. An additional feature is the provision of a "challenge inspection" whereby a State Party can request an inspection of any site in another State Party at short notice. While there is a filtering process to dismiss spurious requests for challenge inspections, the underlying principle is that such inspections can occur literally anywhere in a State Party.[11]

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[9] Stockholm International Peace Research Institute, above n 32, 105.
[10] *Convention on the Prohibition of the Development, Production, Stockpiling and Use of chemical Weapons and on their Destruction*, opened for signature 13 January 1993; 32 ILM 800 (entered into force 29 April 1997) ('CWC'). As at 31 December 1998, there were 121 States Parties and an additional 48 State Signatories.
[11] It is interesting to note that the CWC will attempt to achieve adequate monitoring of chemical industry which was deemed not possible in 1926 -partly a consequence of the major developments in chemical analysis instrumentation which allow effective verification.

The CWC is justifiably heralded as a major breakthrough in multilateral arms control. It was the first comprehensively verifiable multilateral treaty that completely banned an entire class of weapons, and firmly limited activities that may contribute to the production of those weapons. Thus, it went further than any other treaty in terms of.the scope of prohibition, and the depth, extent and intrusiveness of verification provisions.

The CWC entered into force on 29 April 1997 and there are currently 121 States Parties. Perhaps most importantly, States Parties include: both the USA and the Russian Federation (RF), which are the two largest possessors of chemical weapons; the major chemical producing and exporting states of Western Europe; and some of the major developing States with chemical production capability. Several key Middle Eastern States. Have still refused to participate in the Convention but an increasing number of States are choosing to participate. The Organisation for the Prohibition of Chemical Weapons (OPCW), which has been established in The Hague to administer the CWC, is responsible for the verification regime.[12] There are now more than 200 inspectors employed by the OPCW and inspection teams from the Organisation have already undertaken many of the inspection tasks outlined in the verification regimes to provide assurance of States Parties' compliance with CWC obligations.[13]

At the time the Convention was opened for signature and again, at the first Conference of States Parties after the Convention had entered into force, many representatives of States and of international organisations acknowledged the significance of the multilateral achievement to ban these weapons with such terrible consequences -which cause superfluous injury and unnecessary suffering to those unfortunate enough to be exposed to them.[14] While many of

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[12] For details of the Verification measures of the CWC, see Robert J Mathews, 'Verification of Chemical Industry Under the Chemical Weapons Convention' in John B Poole and Richard Guthrie (eds), Verification 1993: *Arms Control, Peacekeeping and The Environment* (1993) 41.

[13] Robert J Mathews, 'Entry into force of the Chemical Weapons Convention', *SIPRI Yearbook 1998: Armaments, Disarmament and International Security* (1998) 490-500.

[14] See, eg, the statement by Boutros Boutros-Ghali:

> je veux ouvrir le volumineux dossier qui nous réunit ici sur sa pièce essentielle: I' angoisse d'hommes, de femmes, d'enfants devant des armes imparables; des armes qui detruisent et tuent sans qu'il soit possible ni de combattre, ni de fuire, ni même de se défendre. Leurs effets fulgurants sur les soldats qui y étaient exposés, les séquelles irrémédiables qu' elles laissent aux combattants qui avaient la chance d'en réchapper, les souffrances et la terreur que leur emploi engendraient chez les hommes des tranchées, disent I'horreur de cette arme. Nous sommes rassemblés ici pour dire que nous ne I'acceptons plus.

Discours de M. Boutros Boutros-Ghali, Secrétairé général des Nations Unies, prononcé 1ors de la cérémonie d'ouverture à la signature de la Convention sur les annes chimiques, Paris, 13 January 1993 (copy on file with authors); and the statement by Francois Mitterrand:

> II a fallu I'emotion suscitée par les massacres de Halabja en mars 1988, évoqués par Ronald Reagan et par moi-même à la tribune des Nations-Unies...pour que le débat fût relancé et qu'à l'initiative des Etats-Unies et de la France...fussent réaffirmes l'autorité du Protocole de 1925 et le caractere insupportable des armes chimiques. Un élan decisive avait été donné.

Discours de Monsieur Francois Mitterrand, President de la République à l'Occasion de la S gnature de la Convention d'lnterdiction des armes Chimiques, Maison de l'UNESCO, 13 January 1993 (copy on file with authors). See also the statement by Kofi Annan:

> What you have done of your own free will is to announce to this and all succeeding generations that chemical weapons are instruments that no state with any respect for itself and no people with any sense of dignity would use in conflicts whether domestic or international. You have been summoned by history and you have answered its call. One of the most monstrous tools of warfare has been ruled intolerable by all States Parties

these sentiments were undoubtedly genuine, the principal motivation for the conclusion of the Convention had less to do with deleterious humanitarian consequences of the weapons and more to do with other strategic security factors -most importantly, the growing concerns of horizontal proliferation of chemical weapons and the recognition by both the USA and the RF that they did not need to retain their chemical weapons stockpiles post Cold War. This much is clear in the contrast between the willingness of the international community to agree to the comprehensive prohibition of chemical weapons while demonstrating reluctance to commit to similar prohibitions in relation to other specific categories of weapons.

4.2 *Biological Weapons*

As already mentioned, the 1925 Geneva Protocol, *inter alia*, prohibited the use of 'bacteriological methods of warfare'. However, as with asphyxiating, poisonous or other gases, the Geneva Protocol prohibited neither the production nor the stockpiling of biological weapons. Again, the limitations of the Geneva Protocol resulted in extensive use of biological weapons by Japan against China in the early 1940s in clear violation of international legal norms. Apparently the biological agents deployed by Japanese forces included cholera, anthrax and plague. Estimates of the number of biological weapons-related deaths in China range from several thousand[15] to 'hundreds of thousands'.[16]

The Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction[17] (BWC) was negotiated between 1969 and 1971, opened for signature in 1972 and entered into force in 1975. It now has 141 States Parties. The BWC was the first true multilateral disarmament treaty, being the first Convention to ban an entire class of weapons. States Parties to the BWC undertook never to develop, produce, stockpile or otherwise acquire or retain biological agents or toxins, or their delivery systems. Furthermore, the BWC obligated each State Party to destroy, or to divert to peaceful purposes, all agents, toxins, weapons, equipment and means of delivery not later than 9 months after the Treaty entered into force for it. The BWC has now been in force for over 20 years. Though it constitutes an important landmark in arms control, a number of developments since 1975 have resulted in assessments that the BWC is seriously weak and lacks credibility because it contains no effective verification provisions.[18]For example, the advances in biotechnology since the mid-1970s have increased the capability to manufacture a number of highly useful biological products

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Kofi A Annan, *Opening Remarks at the First Conference of the States Parties to the Chemical Weapons Convention*, The Hague, 6 May 1997 (copy on file with authors); and the statement by Tony Lloyd:

> The images of blinded men at the battle of Ypres in 1915, pathetically struggling to walk, a hand on the shoulder of the man in front are imprinted on all our minds. Other images are sadly more recent but equally horrifying. Which of us can forget the traumatic pictures of Iraqi Kurdish women and children brutally gassed to death by their own government at Halabja?

Statement by Mr Tony Lloyd MP, Minister of State, Foreign and Commonwealth Office of Great Britain and Northern Ireland to the First Session of the Conference of the States Parties to the Chemical Weapons Convention, The Hague, 8 May 1997 (copy on file with authors).

[15] See Stockholm International Peace Research Institute, *Yearbook on World Armaments and Disarmament* (1996) 687.

[16] News Chronology, *Chemical Weapons Bulletin* (31 July 1995).

[17] *Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction*, opened for signature 10 April 1972; 11 ILM 3320; 1971 *UN Juridical Year Book* 118) (entered into force 26 March 1975) ('BWC') As at 17 March 1999, there were 141 States Parties.

[18] For a critique of the BWC see Jozef Goldblat, 'The Biological Weapons Convention: An Overview' (1997) 318 *International Review of the Red Cross* 251.

(including agricultural and pharmaceutical products) on an industrial scale. Unfortunately, the same technology can also be used to produce biological agents for weapons purposes.[19]

Unresolved allegations of clandestine production or use of biological weapons since 1975 have caused a serious loss of credibility in the BWC. In 1980, the USA claimed that an outbreak of anthrax at Sverdlovsk, in the Former Soviet Union (FSU), raised questions concerning compliance by the FSU with its BWC obligations. In 1992, President Yeltsin admitted that there had been an offensive biological weapons program in the FSU during the previous 20 years, and acknowledged that the Sverdlovsk anthrax outbreak was the result of military research to make biological weapons.[20]

The recent revelations from the UN Special Commission for Iraq[21] (UNSCOM) concerning an offensive biological weapons program in Iraq, in which Iraq had spent several years developing, producing, weaponising and testing a number of biological agents, provides further evidence of the need to strengthen the provisions of the BWC.[22] In addition, intelligence assessments from the USA[23] and the RF[24] have concluded that about 8 countries either have, or are seeking, an offensive biological weapons capability. Most States Parties to the BWC now accept that the Convention does require additional strengthening through the development of verification or compliance monitoring procedures.[25] Progress towards that goal is well under way.[26]

The analysis of the influence of humanitarian concerns in the negotiations for the BWC is similar to that for the CWC. No one doubts the potentially diabolical effects of germ warfare, hence, expressions of the significance of concluding multilateral agreement to prohibit any effort to attain an offensive biological weapons capability, let alone use biological weapons, are entirely justified. The argument here, however, is that the BWC was not concluded primarily because of the deleterious humanitarian consequences of biological weapons but

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[19] For example, using recombinant techniques, toxin producing genes could be spliced to a common host organism, enabling large scale production (within a short time) of toxic agents which have previously only existed in nature in small quantities. See Malcolm Dando, *Biological Warfare in the 21 st Century: Biotechnology and the Proliferation of Biological Weapons* (1994).

[20] Stockholm International Peace Research Institute, *Yearbook on World Armaments and Disarmament* (1993) 287-288.

[21] The UN Special Commission for Iraq was established pursuant to UN Security Council Resolution 687, 46 UN SCOR, UN Doc. S/RES/687 (3 April 1991) with the responsibility to identify the full scope of Iraq' s capabilities in relation to nuclear, biological and chemical weapons and long-range missile delivery systems, to oversee the destruction of each of those pr grams and to monitor Iraq's compliance with its obligations not to rebuild those programs.

[22] Iraq's BW program embraced a comprehensive range of agents and munitions. Agents included lethal agents (eg. anthrax, botulinum toxin and ricin), incapacitating agents (eg. aflatoxins, mycotoxins and rotavirus) and "economic" agents (eg. wheat cover smut). The BW delivery systems ranged from tactical weapons (eg. artillery shells) through to strategic weapons (eg. aerial bombs and missile warheads filled with anthrax). See UN Security Council Doc. S/1995/864, dated 11 October 1995. At the time when Iraq was developing its BW program, it was a Signatory but not a State Party to the BWC. Iraq ratified the BWC in 1991 at the direction of the UN Security Council under the provisions of UN Security Resolution 687.

[23] USA Congress, Office of Technology Assessment (OTA), 'Proliferation of Weapons of Mass Destruction: Assessing the Risks', OTA-ISC-559 (1993) 65.

[24] Yevgeny Primakov, 'New Challenge after the Cold War: The Proliferation of Weapons of Mass Destruction', Report by the Foreign Intelligence Service of the Russian Federation (1993).

[25] Based on the decisions taken at the 1994 Special Conference of States Parties to the BWC.

[26] Annabelle Duncan and Robert J Mathews, 'Development of a Verification Protocol for the Biological Weapons Convention' in Richard Guthrie (ed), *Verification 1996: The VERTIC Yearbook* (1997) 151-70.

because of concerns about horizontal proliferation of these weapons and of the difficulties of effective defence against biological weapon attack.

4.3 *Nuclear Weapons*

Following various unsuccessful attempts in the early post World War II years to negotiate a treaty to eliminate nuclear weapons, negotiations focussing on the less ambitious objective of non-proliferation of nuclear weapons were commenced by the Eighteen Nation Disarmament Committee in 1962. The negotiation of the Nuclear Non Proliferation Treaty[27] was concluded in 1968 and the treaty entered into force in 1970. It now has 187 States Parties and can clai'm broad and diverse membership. It is unique among key global multilateral treaties in that it establishes a discriminatory regime among States Parties. The NPT distinguishes between nuclear weapon States Parties and non-nuclear weapon States Parties based on those States (coincidentally the permanent five (P5) members of the UN Security Council) which had 'manufactured and exploded a nuclear weapon or other nuclear explosive device prior to 1 January 1967'.[28] Under the provisions of the NPT, the former are entitled to retain their existing nuclear weapons stockpiles and are not prohibited from developing new weapons systems or from testing and stockpiling any such weapons. The only NPT obligation purporting to limit the right of nuclear weapon possessor States Parties to continue an indefinite nuclear arms build-up is the obligation to undertake negotiations for an agreement for nuclear disarmament.[29]

By contrast, non-nuclear weapon States Parties undertake not to acquire nuclear weapons and to open any peaceful nuclear facilities to inspection b the International Atomic Energy Agency (IAEA) -the body responsible to administer the NPT and to monitor compliance by States Parties with their treaty obligations. IAEA inspection teams inspect nuclear facilities on a routine basis to confirm that declared fissionable material can be accounted for, and has not been diverted to non-peaceful purposes.

The NPT has proved largely successful as an effective regime in controlling horizontal proliferation of nuclear weapons. A former Australian F reign Minister, Gareth Evans, has described the NPT as 'the single most effective and widely supported arms control agreement in existence: without it we would by now be facing a world with perhaps twenty or thirty nuclear weapons states'.[30] It should be noted, though, that the NPT has clearly not prevented horizontal proliferation altogether. A number of key States have been able to produce nuclear weapons or have at least reached a 'threshold nuclear weapons capability' outside the NPT regime and continue to refuse to renounce nuclear weapons and to join the NPT as non-nuclear weapon States.[31] Furthermore, two NPT States Parties (Iraq and the Democratic

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[27] *Treaty on the Non-Proliferation of Nuclear Weapons*, opened for signature 1 July 1968, 729 UNTS 161; 7 ILM 809 (entered into force 5 March 1970) ('NPT). As of 17 March 1999, there were 187 States Parties.
[28] NPT, art IX(3).
[29] Article VI of the NPT requires States Parties to the NPT to 'pursue negotiations in good faith on effective measures relating to the cessation of the nuclear arms race at an early date and to nuclear disarmament' leading to the negotiation of a treaty banning nuclear weapons. It should be noted, however, that the USA and the RF have agreed to substantial reductions to their nuclear arsenals in bilateral treaty arrangements -particularly the Treaties on the Reduction and Limitation of Strategic Offensive Arms (START I and II).
[30] Gareth Evans and Bruce Grant, *Australia's Foreign Relations in the World of the 1990s* (2nd ed, 1995) 84.
[31] The principal examples are India, Pakistan and Israel. South Africa also developed a nuclear weapons capability outside the NPT regime but, after the end of apartheid, unilaterally destroyed its nuclear weapons capability and joined the NPT as a non-nuclear weapon S te Party.

People's Republic of Korea) managed to avoid their NPT obligations in spite of IAEA inspections.[32]

Subsequently, many have called for a strengthening of the NPT/IAEA safeguards regime. For example, in 1993 the Board of Governors of the IAEA requested the IAEA' s Standing Advisory Group on Safeguards implementation to make proposals for tightening the NPT Safeguards Regime and making it more efficient.[33] Measures which have been developed under the subsequent "Programme 93+2" have included: expanded declarations of nuclear activities by States Parties; "no notice" (unannounced) inspections which would include access to non-declared parts of nuclear sites and non-declared sites where nuclear facilities are located (similar to the "Challenge Inspections" provisions under the CWC); and improved monitoring of import and export data.[34] The agreement to the indefinite extension of the NPT at the Review Conference in April-May 1995[35] was an important event for the future of the NPT.

The conclusion of the negotiation of the Comprehensive Test Ban Treaty[36] (CTBT) in 1996 was seen as a positive development in promoting the non-proliferation of nuclear weapons. There have also been recent attempts to encourage the nuclear weapons States to reduce their nuclear weapons stockpiles (eg The Canberra Commission[37]) which may well assist in working towards the ultimate objective of elimination of nuclear weapons.

In contrast to the situation with chemical and biological weapons, there has still been no agreement on a general prohibition on nuclear weapons. By participating in the Nuclear Non-Proliferation Treaty, 178 States, the overwhelming majority of the international community, have agreed to a prohibition on the acquisition, production, stockpiling, development and use of nuclear weapons. Only the five permanent members of the Security Council, as the privileged nuclear-weapon States Parties to the NPT, and the so called 'nuclear threshold states' -particularly Israel, India and Pakistan[38]- which have all refused to become parties to

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[32] In both cases, the UN Security Council became actively involved, condemning these Particular violations and reiterating the general principle that the proliferation of nuclear .weapons, particularly in violation of NPT obligations, poses a threat to international peace and security. See, in particular, UN Security Council Resolutions 687 and 825 -46 UN SCOR, UN Doc. S/RES/687 (3 April 1991) and 48 UN SCOR, UN Doc. S/RES/825 (11 May 1993) respectively.

[33] ‘Strengthening of the Safeguards System’, Report by the Director-General to the IAEA General Conference, IAEA Doc. GC(XXXVI)/1017 (15 September 1992). See also Hans Blix, 'IAEA Safeguards: New Challenges' (1992) XV Disarmament: *A Periodic Review by the United Nations* 40-6.

[34] Suzanna van Moyland, 'Programme 93+2: Evolution of lAEA Safeguards' in Richard Guthrie (ed), *Verification 1996: The VERTIC Yearbook* (1997) 151-70.

[35] Report of the Australian Delegation, 1995 *Review and Extension Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons*, Department of Foreign Affairs and Trade (1995).

[36] Opened for signature 24 September 1996, UN Doc A/50/1027/Annex (1996), adopted by GA Res 50/245, 50 UN GAOR (125th mtg), UN Doc A/50/L.78 (1996); (1996) 35 ILM 1439 (not yet in force) ('CTBT). As at 17 March 1999, there were 29 States Parties.

[37] In November 1995, the Australian government convened an international commission (composed of seventeen distinguished, internationally diverse members) with the specific mandate 'to propose practical steps towards a nuclear-free world'. In August 1996, the Commission issued a consensus report that rejected the utility of nuclear weapons and recommended a series of steps to bring about the verifiable elimination of nuclear weapons, commencing with all nuclear powers taking nuclear forces off alert and, ultimately, the elimination of nuclear weapons and a ban on the production of fissile materials for nuclear explosive purposes. See Canberra Commission, *Report of the Canberra Commission on the Elimination of Nuclear Weapons* (1996).

[38] The term 'nuclear threshold State' is arguably no longer apt to describe India and Pakistan after the dramatic shift in position with reciprocal, multiple nuclear weapons testing by both States in May 1998.

the Nuclear Non-Proliferation Treaty and to relinquish the right to develop nuclear weapons, are not bound by the conventional obligation prohibiting possession of n clear weapons.[39]

Many of the non-nuclear States Parties to the NPT, particularly many "Non-Aligned" States, had become frustrated with the lack of progress by the P5 in fulfilling their obligations under Article VI of the NPT towards a comprehensive treaty ban on nuclear weapons.[40] The UN General Assembly Resolution requesting an Advisory Opinion from the International Court of Justice[41] on the Legality of the Threat or Use of Nuclear Weapons was adopted by a substantial majority.[42] The request for an advisory opinion was a controversial strategy but one clearly designed to advance the cause of nuclear disarmament.

In July 1996, the International Court of Justice handed down the long awaited Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons.[43] The Advisory Opinion was a somewhat disappointing, if not entirely unsurprising, decision for advocates of nuclear disarmament. Some aspects of the Opinion were approved unanimously -in particular, the reaffirmation that any use of nuclear weapons is subject to the customary international law principles governing the conduct of armed conflict, and the reminder to Nuclear Weapons States of the obligation to negotiate and to conclude agreement on a comprehensive ban on nuclear weapons. These two unanimous findings produced some positive outcomes from the Opinion. However, on the crucial issue of the legality of the threat or use of nuclear weapons, only seven judges could endorse the finding of the court. The other seven judges dissented from the decision for different reasons.[44]

The Court determined that, despite the lack of a specific prohibition on the threat or use of nuclear, weapons in conventional or in customary international law, the general principles of customary international law, particularly the principles of international humanitarian law, would apply to any use or threat of use of nuclear weapons. Although the Court was able to conclude that the use of nuclear weapons 'seems scarcely reconcilable with respect for such requirements', the judges felt compelled to reach a qualified conclusion because of their perceived lack of 'sufficient elements to enable [the Court] to conclude with certainty that the use of nuclear weapons would necessarily be at variance with the principles and rules of 1aw

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[39] These few, but influential, States have successfully determined that the general principles prohibiting weapons which cause superfluous injury or unnecessary suffering or which are inherently indiscriminate have no effect on the legality of the possession of nuclear weapons in the absence of a comprehensive, multilateral treaty prohibition.

[40] This sense of frustration was heightened following the Non-Aligned States' perception that this issue was not adequately addressed at the 1995 NPT Review Conference.

[41] The competence of the Court to provide an Advisory Opinion is outlined in Article 65(1) of the Court's Statute: 'The Court may give an advisory opinion on any legal question at the request of whatever body may be authorised by or in accordance with the Charter of the United Nations to make such a request.'

[42] UN General Assembly Resolution 49/75K was adopted by 78 votes to 43 (France, the Russian Federation, the United Kingdom and the United States voting against) with 38 abstentions. China was absent from the voting. See: *Request for an Advisory Opinion from the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons*, GA Res 49/75K, UN GAOR, 49th Sess, Supp No 49 at 71, UN Doc A/49/49 (1995).

[43] *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons (' Joint Opinion'),* 8 July 1996, reprinted in (1996) 4 ILM 809. For a detailed analysis of the inttmational humanitarian law implications of the Opinion see the articles by Yves Sandoz, Luigi Condorelli, Eric David, Louise Doswald-Beck, Hisakazu Fujita, Christopher Greenwood, Timothy L H McCormack, Manfred Mohr and John H McNeil1 in the symposium issue dedicated to analysis of the Opinion in (1997) 316 *International Review of the Red Cross* 3-118.

[44] According to art 55 of the Statute of the Court, the President has a casting vote in the event of a split decision. In this Opinion, President Bedjaoui voted for the finding in the Joint Opinion and, as a consequence, the position enunciated in the *dispositif* was the prevailing one.

applicable in any circumstance'.[45] Implicit in the reasoning of the court in the Advisory Opinion on the Legality of the Threat or Use of nuclear Weapons is the conclusion that, in the absence of a specific agreement by the international community to prohibit a particular weapons category, the general principle of prohibition of weapons which cause superfluous injury and unnecessary suffering has limited practical effect.

The limited application of the general prohibition on weapons which cause superfluous injury or unnecessary suffering, implicit in the reasoning to the Court, has been made explicit in the final text of the Rome Statute for the International Criminal Court. In the negotiations in Rome, a number of States called for an explicit reference to the use of nuclear weapons as one of the possible acts constituting a war crime. Not surprisingly, such a reference was unacceptable to a number of delegations including the P5. However, other delegations had anticipated broad acceptance to include the general prohibition on the use of weapons which cause superfluous injury or unnecessary suffering in the definition of a war crime, particularly because of the established customary law status of this prohibition. Again, several delegations refused to countenance any such general principle which might be capable of being interpreted to extend to the use of a nuclear weapon.

We are not suggesting here that the effects of the use of nuclear, or any other, weapons are not covered by other aspects of the definition of a war crime. Article 8(b)(i)-(v) and 8(e)(i)-(iv), for example, prohibit intentional attacks against the civilian population, civilian objects or other protected targets. Additionally, it is possible that in certain circumstances the effects of the use of particular weapons will be covered by the definition of crimes against humanity in Article 7 of the Court's Statute and, in exceptional circumstances, by the definition of genocide in Article 6 of the Statute. clearly, it is essential that the Rome Statute cover the illegal consequences of the *effects* of weapons. Had the Statute focused exclusively upon the *effects* of weapons rather than on their use, there would be less reason for concern here. However, the Statute establishes an inconsistent regime to cover the use of particular weapons.

Article 8(b)(xvii)-(xix) incorporates customary law prohibitions against the use of poison or poisonous weapons; asphyxiating, poisonous or other gases; and, dum dum bullets. The list of weapons the use of which explicitly falls within the subject matter jurisdiction of the Court is limited to these three categories. The use of any other weapons not covered in the list will only fall within the subject matter jurisdiction of the Court if the criteria in Article 8(2)(b)(xx) are satisfied:

> Employing weapons, projectiles and material and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering or which are inherently indiscriminate in violation of the international law of armed conflict, provided that such weapons, projectiles and material and methods of warfare are the subject of a comprehensive prohibition and are included in an annex to this Statute, by an

[45] International law has traditionally distinguished between the law regulating the legitimate resort to force (the jus ad helium), and the law regulating the actual deployment of force (the jus in hello). Any legitimate exercise of force must be consistent with both sets of principles. The Joint Opinion, however, confused the *jus ad bellum* with the *jus in bello*, bfcause the majority of the Court declared a non-finding (non liquet) -a determination that it was not possible to rule out the possibility of a legitimate use of nuclear weapons in an 'extreme circumstance of self-defence, in which the very survival of a State would be at sake'.

> amendment in accordance with the relevant provisions set forth in articles 121 and 123.[46]

This formulation in Article 8(2)(b)(xx) introduces an unprecedented nexus between the prohibition on 'superfluous injury or unnecessary suffering' and the conclusion of multilateral negotiations for a comprehensive ban on a weapons type. Apart from the three categories of weapons specifically referred to in Article 8(2)(b)(vii)-(xix), the use of any other reasons can only constitute a war crime if the weapon is already the subject matter of a 'comprehensive prohibition' and is also added to an annex to the Statute added by amendment at some stage in the future and pursuant to the amendment procedure stipulated in Articles 121 and 123. One implication from this formulation is that while chemical weapons, biological weapons, laser blinding weapons and anti-personnel landmines, all the subject of comprehensive treaty prohibitions, may possibly be included in an Annex to the Statute at some future stage, nuclear weapons cannot be included until a comprehensive treaty prohibition on nuclear weapons has been concluded.

The possibility that the decision to deploy dum dum bullets, for example, can constitute a war crime but that any decision to deploy nuclear weapons cannot per se constitute a war crime will always raise some questions of consistency of approach in the subject matter jurisdiction of the Court. It is for this reason that it may have been preferable to have deleted any reference in the subject matter jurisdiction of the Court to the use of specific weapons.

4.4 *Anti-Personnel Land Mines*

The International Committee of the Red Cross (ICRC) estimates that as many as 27,000 people are either killed or severely injured by anti-personnel land mines every year. The overwhelming majority of these victims are civilians because most land mines remain active in the ground long after the cessation of armed conflict -in some cases for up to sixty years or longer. It has also been estimated that there are up to 120 million sown land mines in 64 countries around the world. While these land mines are being cleared at a rate of 100,000 per year, millions of new land mines are being sown every year. Even if from today no new land mines were sown, at current rates of clearance it would still take at least 1,000 years to clear the land mines currently in the ground at a cost of approximately US$33 billion.[47] Most anti-personnel land mines detonate on the exertion of a minimum amount of pressure[48] but, whatever the triggering mechanism, no land mine distinguishes between soldiers and civilians as the victims of the explosion.

Concerns were expressed during the 1970s about the problem posed by anti-personnel land mines and there were calls to negotiate a treaty to prohibit anti-personnel land mines and other "inhumane weapons". In 1980, a UN sponsored conference adopted the text of the Convention on Prohibitions or Restrictions on the U se of Certain Conventional Weapons Which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects.[49] This

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[46] Emphasis added.

[47] UN-based figures are cited in International Committee of the Red Cross, *Special Brochure: Landmines Must be Stopped* (1995) 4. More recently, some sources have claimed that the total number of landmines deployed world-wide is closer to half of the estimated 110 million or more. See Zdzislaw Lachowski, 'The Ban on Anti-Personnel Mines', *SIPRI Yearbook 1998: Armaments, Disarmament and International Security*, 545-58.

[48] There are types of anti-personnel land mines which are detonated by trip wires or by remote control but these types are not as prevalent as those which explode under the pressure of body weight.

[49] Above n 4.

Convention, often referred to as the 'Certain Conventional Weapons Convention' (CCWC) was opened for signature in New York on 10 April 1981, and entered into force on 2 December 1983 (ie. 6 months after 20 ratifications).[50]

Protocol II of the CCWC placed restrictions on the use of anti-personnel land mines, booby traps and similar devices.[51] The Protocol also prohibited, in all circumstances, the deployment of anti-personnel land mines against the civilian population; prohibited the indiscriminate use of mines; specified that all feasible precautions must be taken to protect civilians fi om the effects of mines; restricted the use of mines (other than remotely delivered mines) in populated areas; prohibited the use of remotely delivered mines unless their locations can be accurately recorded or an effective neutralising mechanism is used; specified that effective early warning shall be given of any delivery or dropping of remotely delivered mines which may effect the civilian population, unless circumstances do not permit; specified that the Parties to a conflict shall record the location of all pre-planned minefields laid by them and endeavour to ensure the recording of the location of all other minefields.

However, there were serious limitations in the CCWC. For example, there was lack of clarity of some provisions and obligations, including the responsibility of removal of minefields after the conclusion of hostilities. There were no provisions for "undetectable" plastic mines, no procedures for verifying a party's compliance, no procedures for investigating alleged non-compliance and no provisions on production of, or trade, in land mines. In addition, Protocol II did not apply to internal armed conflict (for example, insurgents, rebels, civil wars).

The CCWC may, arguably, have raised international norms against the inhumane use of certain types of weapons. However, based on the relatively low rate of participation in the CCWC, this is less than certain.[52] Furthermore, based on the amount of terrible suffering and devastation currently being caused by anti-personnel land mines, the CCWC has clearly been ineffective in reducing the inhumane deployment of anti-personnel land mines. Unfortunately, the attempts to strengthen Protocol II to the CCWC with the Revised Protocol II negotiated through the 1995/1996 CCWC Review Conference[53] (eg. application of Revised Protocol II to non-international armed conflicts; prohibition on the use of non-detectable, non-self destructive or non-deactivating mines) are unlikely to significantly reduce the anti-personnel land mines problem.[54]

Until recently, many defence ministries have argued that anti-personnel 1and mines are essential to their strategic security interests despite the terrible humanitarian consequences of

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[50] For a detailed discussion of the negotiating history of the Convention, see Captain J Ashley Roach, 'Certain Conventional Weapons Convention: Arms Control or Humanitarian Law?' (1984) 105 *Military Law Review* 3.

[51] For a detailed discus-sion of the negotiating history of Protocol II see Lieutenant Colonel Burris M Carnahan, 'The Law of Land Mine Warfare: Protocol II to the United Nations Convention on Certain Conventional Weapons' (1984) 105 *Military Law Review* 73.

[52] For example, there were only 31 States Parties to the CCWC at the beginning of 1992. This number rose to 57 in the lead up to the CCWC Review Conference in 1995.

[53] *Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices* as Amended on 3 May 1996, (1996) 35 *ILM* 1209 ('*Revised Protocol II to the UN Convention on Conventional Weapons*').

[54] If anything, the regulation of anti-personnel land mines has only become more complicated because some States are party to neither Protocol II nor Revised Protocol II, some states are party to both Protocolll and Revised Protocol II and still other States are party to one version of the Protocol or the other but not both instruments. This establishes a confusing and complex web of international legal obligations between various States in their relations with each other.

the illegitimate use of these weapons. In the context of intergovernmental negotiations on attempts to regu1ate the deployment of land mines, the deleterious humanitarian conseqences of the use of land mines have often been overlooked. The inter governmental negotiation process, dominated by representatives from foreign ministries and defence establishments, has laboured over wording for limitations on the use of anti-personnel land mines -for example, how any grams of detectable material need to be included in each mine, what eight of pressure is required to trigger a mine, what number of mines in a sample of 1,000 which fail in the detectable or self destructing processes is adequate? While this process has dragged on, tens of thousands of civilians h ve died or lost limbs as a result of contact with land mines, and millions more land mines have been manufactured, sold and sown.

The anti-personnel land mine problem again exposes the gap between general principles and their application to specific weapons. It is self -evident that, like all weapons, land mines are inanimate objects and, therefore, incapable of independently distinguishing between soldiers and civilians. The legal prohibition of weapons which do not discriminate a plies to the use or deployment of weapons more often than to their design. Defence lawyers have argued that, in the absence of a specific conventional prohibition, the legitimate deployment of land mines in accordance with Protocol n to the Certain Conventional Weapons Convention on marked fields which are mapped and cleared after the cessation of armed conflict) renders the weapon discriminate and therefore not inconsistent with the general prohibition on weapons which fail to discriminate between military and civilian targets. This argument continues that the weapon itself cannot be illegal if the possibility of legitimate deployment exists.

For many States, the conclusion of the Ottawa Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel land Mines and on Their Destruction[55] removes much of the uncertainty revised by the two versions of Protocol n to the 1980 Convention. For States parties to the Ottawa Convention, not only are anti-personnel land mines prohibited but all stockpiles must be destroyed within specific time periods after entry into force of the Convention.

Many see the conclusion of the Ottawa Convention as a major victory for arms control, particularly for a weapon which causes incredible suffering primarily to innocent civilians. The Convention was negotiated in record time and demonstrates what can be achieved when the requisite political will exists. Others are more circumspect. The Ottawa Convention ay be a step in the right direction but it has two major limitations: (I) it will not change the reality of the devastation caused by the anti-personnel land mines still in the ground and waiting to explode; (2) several significant producers, users and exporters of anti-personnel land mines did not participate in the negotiations and have stated that they will not become parties to the convention.[56]

In recognition of these limitations, some States, including Australia which has recently ratified the Ottawa treaty,[57] have suggested that other supplementary measures are required. It has been argued that the conclusion of the Ottawa treaty cannot be allowed to turn attention away from the enormous challenge of anti-personnel land mine clearance, and that increased

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[55] See above n 29.

[56] See Zdzislaw Lachowski, 'The Ban on Anti-personnel Mines', *SIPRI Yearbook 1998: A ments, Disarmament and International Security*, 545-58.

[57] Minister for Foreign Mfairs, The Ron. Alexander Downer MP, Australia Ratifies landmines Ban Convention, Media Release (15 January 1999), text available online at:
<http://www.dfat.gov.au/media/releases/downer/fa003-99.html>.

global resources for mine clearance and rehabilitation for victims is essential. Additionally, it has been suggested that the UN Conference on Disarmament negotiate a ban on transfer of anti-personnel land mines that might include some States which have refused to participate in the Ottawa process.[58] One thing is certain. Future developments in arms control and disarmament which will increase protection for the victims of armed conflict will not happen overnight. There is a role for 'creeping incrementalism' (characterised by negotiations in the Conference on Disarmament) as there also is for' dramatic progress' (characterised by the negotiations for the Ottawa Convention) and one should not be seen as mutually exclusive from the other.

Perhaps the most significant aspect of the Ottawa Convention for the relationship between international humanitarian law and arms control is that the conclusion of this treaty is the first occasion on which an arms control agreement banning an entire category of weapons has been motivated primarily by humanitarian concerns. The international humanitarian 1aw instruments purporting to regulate the use of anti-personnel land mines were demonstrably ineffective in alleviating the suffering of huge numbers of civilian casualties.[59] However, the fascinating reality has been that complete disarmament has been widely acknowledged as a fundamental step in the process of improving protection for victims of armed conflict. The Ottawa Convention thus represents an unprecedented level of relationship between the negotiation of arms control regimes as a means of improving respect for fundamental principles of international humanitarian law.

4.5 *Other Conventional Weapons*

One of the most encouraging recent developments in the whole area of controlling the weapons of war was the agreement in 1995 to prohibit laser and blinding weapons in a new Protocol IV to the CCWC.[60] This agreement was unique in arms control history because the prohibition was negotiated before the weapons were actually deployed in battle. A number of countries had been developing the technology to inflict blindness on victims of laser weapons and in some circumstances these weapons had gone into production. However, the weapons have not been deployed in battle situations and to have reached agreement in the international community for their prohibition before that has happened is a landmark development.

By contrast, achievements in the regulation of the use of other conventional weapons have been much more modest.[61] The UN Register of Conventional Arms is currently the only global co-operative security regime dealing with the transfer and accumulation of major conventional weapons. The idea of an international register may be traced at least as far back as the aftermath of World War I, and such a register was operated for a number of years by

[58] Address by the Ron Alexander Downer MP, Minister for Foreign Mfairs; to the Conference on Disarmament in Geneva on 3 February 1998: Two Swords for the Beating', (March 1998) *Peace and Disarmament News* 10, 12-13.

[59] For example, as discussed above, the imperatives of intense human suffering forced the additionally apolitical ICRC to adopt anything but a neutral position in the campaign to ban anti-personnel land mines. Of course, neutrality was not jeopardised in the sense that the ICRC was not critical of specific States in this campaign.

[60] *Additional Protocol to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects (Protocol on Blinding Laser Weapons)*, opened for signature 13 October 1995; 35 ILM 1218 (entered into force 30 July 1998) ('Protocol IV to the 1980 Weapons Convention') As at 28 October 1998, there were 30 States Parties.

[61].On the increasingly deleterious consequences, particularly for civilians, of the unrestrained transfer of conventional weapons, see International Committee of the Red Cross, *Arms Availability, Violations of International Humanitarian Law and the Deterioration of the Situation of Civilians in Armed Conflict (1998).*

the League of Nations. More recently, there have been repeated proposals in the UN to establish a register of arms transfers, but it was only in 1991 that the idea gained wide international support. In December 1991, the UN General Assembly agreed to establish the Register.[62]

In December 1992, the details of its initial design were agreed. It first came in to operation in April 1993, which was the date by which States were requested to supply data on their arms transfers in 1992.

The UN Register is a transparency measure. Participation is voluntary, includes both suppliers and recipients and does not involve any controls on arms transfers. The Register aims to improve transparency relating to conventional arms transfers and holdings in the hope that this may: contribute to the timely identification and prevention of excessive and destabilising accumulations of arms; promote confidence and restraint; and provide a basis for regional or global confidence and security building measures.

The participation rate in the Register has been encouraging -since April 1993, over 130 States have provided information. Some of these States have only submitted information intermittently so that each annual report has only contained information from approximately 90 States.[63] Most major importing and exporting States now provide data. It has been concluded that the Register already has the potential to contribute to regional and international security and domestic accountability, and may have already done so on a modest scale. However, it is far from achieving its full potential.

States have also been invited to provide "background information" on their total holdings of these weapons and their annual procurement of arms from national production. There have been suggestions from some States that the Register should be expanded to cover holdings and national procurement on the same basis as transfers. However, this expansion has been postponed owing to objections from a number of other States including China, India and Israel. For the time being, the Register remains primarily a register of arms transfers.[64]

However, with respect to comprehensive multilateral treaty prohibitions on other conventional weapons there is little cause for any optimism, at least in the immediate future. This point was succinctly made by former Australian Foreign Minister Gareth Evans in 1991 :

> It has to be acknowledged that the international community has yet to come to grips with the problem posed by the huge volumes of conventional arms transfers. While agreements are in place or under negotiation to control or eliminate weapons of mass destruction, there is as yet no remotely comparable process for conventional weapons. We need to acknowledge openly the difficulties which stand in the way of conventional arms control: compared with weapons of mass destruction, they are relatively readily available; trade is well established and lucrative; and considerations of national sovereignty, and the legitimate responsibility of any government to ensure

[62] UNGA Resolution 46/36 L, 46 UN GAOR, UN Doc. AIRES/46/36 L (6 December 1991).
[63] The region with the poorest response rate is the Middle East.
[64] Malcolm Chalmers and Owen Greene, 'The UN Register of Conventional Arms: the Third Year of Operation', in John B Poole and Richard Guthrie (eds), *Verification 1996: Arms Control, Peacekeeping and The Environment* (1996) 249-80.

> national security, mean that countries are reluctant to forgo the right to acquire conventional arms.[65]

Unfortunately, little has happened since 1991 which could warrant a more promising prognosis.

Thus, with respect to conventional weapons, other than those specifically covered by the 1980 CCWC, international humanitarian law instruments are all that is currently available to minimise the risk of these types of weapons causing superfluous injury or unnecessary suffering. The ongoing lack of a definition for superfluous injury or unnecessary suffering makes the ICRC's current project to define the concept all the more significant. At present the ICRC surgeon, Dr. Robin Coupland, is developing a study which attempts to provide precise medical formulae to define the phrase 'superfluous injury or unnecessary suffering'.[66] Coupland's study relies on data from ICRC field hospitals to monitor the injuries caused by specific weapons types and the intention is to develop medical criteria for evaluating particular weapons. If the study can influence the international debate, it will be a major step forward for international humanitarian law.

However, it is also clear that the best guarantee of effective implementation of international humanitarian law principles will be through negotiated comprehensive multilateral prohibitions -not just on use but also on possession, production, stockpiling, testing and transfer. As the ICRC itself has discovered, sometimes arms control regimes which result in comprehensive prohibitions on specific weapons types are an imperative step in the process of improving respect for the international humanitarian law principles.

5. CONCLUSIONS

General principles of international humanitarian law have been developed to alleviate the suffering of combatants and civilians during armed conflict; while efforts to develop arms control treaties to limit, reduce or eliminate stockpiles of particular types of weapons have primarily been motivated by national security concerns. Despite these different motivations, the development of effective arms control treaties can playa major role in supporting the objectives of international humanitarian law, particularly for the control of weapons types that are deemed to cause superfluous injury and unnecessary suffering. Clearly, there is considerable overlap between certain areas of international humanitarian law and arms control (in particular, the prohibition or restriction on the use of specific categories of weapons) and other specific areas of arms control should be regarded as complementary to international humanitarian law objectives (for example, the prohibition of the development, production and stockpiling of specific categories of weapons). Indeed, as discussed in the case studies in this chapter, there have been interesting interactions between the efforts of in International humanitarian practitioners and arms control negotiators in the efforts to control weapons that are deemed to cause superfluous injury and unnecessary suffering. For example, the failed attempt to effectively prohibit chemical weapons through international humanitarian law principles (1 99 Hague Convention) led to the unsuccessful attempts to in the 1920s to negotiate a disarmament treaty, followed by acceptance that the international

[65] 'Seize the Moment', speech by Senator Gareth Evans to the UN Conference on Disarmament Issues, Kyoto, Japan, 27 May 1991 and extracted in Stockholm International Peace research Institute, *Yearbook on World Armaments and Disarmament* (1992) 291.
[66] Coupland (ed), above n 17.

humanitarian law-based 1925 Geneva Protocol was the only achievable outcome at that time. Following the very limited success of the 1925 Geneva Protocol, a comprehensive disarmament treaty (the CWC) was negotiated between 1969 and 1992.

With biological weapons, the limited success of the international humanitarian law based 1925 Geneva Protocol led to the negotiation of an arms control treaty (the BWC) in 1972, which prohibited, *inter alia,* possession of biological weapons and required all States Parties to destroy any existing stockpiles. The limited success of the BWC, at least in part be a case of its lack of effective verification provisions, is currently being addressed through efforts to negotiate a Verification Protocol, based in substantial part on the verification provisions developed for the CWC.

The situation has been somewhat different again with nuclear weapons. The unsuccessful attempts in the 1950s at the objective of complete nuclear disarmament, which was driven partly by humanitarian concerns, led to the acceptance of the less ambitious objective of an arms control treaty which was designed to stop horizontal proliferation (NPT, 1969). By the mid1990s, the lack of progress by the Nuclear Weapons States in efforts to towards nuclear disarmament led a number of other States to seek to have the use of nuclear weapons declared illegal on the basis of general principles of international humanitarian law (ICJ Advisory Opinion, Rome Statute of the International Criminal Court).

The efforts to control anti-personnel land mines in the 1970s, which were driven by humanitarian concerns, resulted in the 1980 CCWC, which contained a combination of international humanitarian law-based principles and arms control measures. The failure of the CCWC to significantly reduce the extent of superfluous injury and unnecessary suffering caused by anti-personnel land mines led to very strong humanitarian quest which resulted in the negotiation of a disarmament treaty (the 1997 "Ottawa Treaty"), in record time, externally to the UN-based arms control negotiation machinery.

Clearly, in the past, for both political and technical reasons, treaty negotiators had to be satisfied with restrictions on the use of weapons, rather than total prohibition/elimination of weapons, and minimal (if any) compliance monitoring machinery. As discussed above, more recently the international community has been confronted with, and has been prepared to respond to, the reality that perhaps the only way to effectively deal with the adverse humanitarian consequences of certain specific weapons categories is a comprehensive prohibition of that weapon type (not simply a prohibition on use) which extends to the destruction of stockpiles.[67] So, for example, the international community of States was subjected to an unprecedented level of influence from humanitarian concerns in the negotiation of an anti-personnel land mines disarmament regime.

The end of the Cold War has opened up unprecedented possibilities in arms control. The more constructive relationship between the USA and the RF, which has emerged post Cold War, may well facilitate the negotiation of future global multilateral arms control agreements. Likewise, scientific research has enabled the development of rapid, cost-effective verification tools which can be designed to make on-site verification more efficient as well as less burdensome to the State being inspected.

[67] See Christopher Greenwood, *International Humanitarian Law and the Laws of War, preliminary Report for the Centennial Commemoration of the First Hague Peace Conference 1899* (1998) [93], [41]. Text available online at: <http://www.rninbuza.nVenglish/f_sum conferences 14.htm1>.

The CWC is already being touted as an important precedent for other arms control instruments. The CWC has also set a new standard for future negotiations and it is now difficult to imagine discussions about a new treaty without effective verification measures as an integral part of the instrument. Its verification regime has important implications for the current proposals to strengthen the existing inspection regime under the NPT and for the establishment of a verification regime for the BWC. It should be less difficult to negotiate similar verification provisions for other treaties after the CWC has demonstrated its effectiveness and acceptability to States Parties.

That said, negotiation of arms control treaties is likely to remain a slow tortuous process through the "conventional" forum of the Conference on disarmament (or similar foram such as the BWC Ad Hoc Group). Also-called "fast-track" process, such as that which resulted in the Ottawa treaty, presents a different, potentially complementary, approach. The Ottawa process demonstrated the emergence of a global 'civil society' billing and able to effectively communicate its own expectations of substantive outcomes from inter-governmental negotiation processes and is an incouraging indication of future possibilities.

With the exception of nuclear, chemical and biological weapons, and those categories of weapons covered specifically by the CCWC and Ottawa treaty, international humanitarian law treaties are likely to remain the major instruments in reducing the risk of specific types of weapons causing superfluous injury or unnecessary suffering. To date, international humanitarian law instruments have had very limited success in reducing the extent of superfluous injury or unnecessary suffering caused by various weapons types. To be effective, the international humanitarian law instruments need to be strengthened by effective compliance monitoring mechanisms, with appropriate penalties for non-compliance, along the lines of recently negotiated arms control treaties. In this context, the recent negotiion of the ICC is a promising development.

Arms transfers, humanitarian assistance & international humanitarian law

by Peter Herby

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Contents

Introduction

The International Committee of the Red Cross has witnessed in its work for war victims throughout the world the increasingly devastating effects for civilian populations of the proliferation of weapons, particularly small arms. The difficulties of providing humanitarian assistance in an environment where arms have become widely available to many segments of society are well known to most humanitarian relief agencies today. However, until recently the relationships between the availability of weapons, the worsening situation of civilians during and after conflict and the challenges of providing humanitarian assistance have not been addressed directly.

The exceedingly high levels of civilian death and injury in recent conflicts, from Bosnia to El Salvador to Liberia to Afghanistan, are no longer being seen simply as an inevitable by-product of these conflicts. Rather, these results are increasingly viewed as a result of inadequate or non-existent control of the flow of weapons — both internationally and domestically. Although few would claim that the weapons themselves are the primary source of recent conflicts, it can be argued convincingly that the easy availability of arms and ammunition increases tensions, heightens civilian casualties, prolongs the duration of conflicts and renders post-war reconciliation and rebuilding far more difficult.

Unregulated availability of Weapons

The unregulated availability of weapons, in particular small arms, combined with their frequent use in violation of the most basic humanitarian norms, poses a direct challenge to the dual mandates of the International Committee of the Red Cross — to assist the victims of conflict and to promote respect for international humanitarian law.

It is clear that the high levels of civilian casualties, which have steadily increased in this century in parallel with the development and proliferation of sophisticated military technology, are *facilitated* (though not necessarily *caused*) by the availability of arms and ammunition. Weapons previously available primarily to organized armed forces are now in the hands of a wide variety of people involved in conflict and post-conflict situations. These include highly destructive weapons such as automatic rifles capable of firing hundreds of rounds per minute, rocket-propelled grenades, mortars and landmines. Whereas previously a single shot fired might have been fired into a crowded market and would have constituted an isolated criminal incident, today it is equally feasible for an individual to fire several hundred bullets from one of the automatic weapons now readily available and thereby unleash an orgy of ethnic killings and civil unrest.

The suffering of civilians affected by conflict grows still worse when the ICRC and other agencies are denied access to the victims owing to direct attacks, mined transport lines or the threat of armed violence. In a large number of recent conflicts, specific regions or even entire countries have become “no go” areas for humanitarian workers on account of attacks or the credible threat of attacks on them. ICRC field staff experienced a growing number of casualties through the mid-1990s. Although this may have been due to the changing nature of conflict, increased proximity to front-lines and the perceived politicization of humanitarian aid, the availability of small arms undoubtedly also played an important role. In addition to the impact on the safety of personnel, weapon availability increases the cost of humanitarian operations. When relief supplies have to be transported by air because landmines have been used to block roadways, the operation’s cost must be multiplied up to 25 times.

Protection of Civilians

Beyond the immediate problems described above, the widespread availability of arms threatens to undermine the fabric of international humanitarian law — one of the principal means of protecting civilians in times of conflict. In addition to its assistance mandate, the ICRC is charged with helping States to promote knowledge of and respect for humanitarian law. However, this body of law assumes that military-style arms are in the hands of armed forces with a certain level of training, discipline and control. When such weapons become available to broad segments of the population, including undisciplined groups, bandits, mentally insecure individuals and even children, the task of ensuring basic knowledge of humanitarian law among those in possession of such arms becomes difficult if not impossible.

Compared with distributing arms, creating an understanding and acceptance of humanitarian rules is a profoundly difficult and time-consuming task. It should come as no surprise that as highly lethal weapons spread throughout a given population, the potential for violations of humanitarian law increases. In the most generous interpretation, the direct and illegal attacks of 1996 on clearly identified Red Cross vehicles and on a hospital reflect a lack of understanding of basic humanitarian norms and of the role of a neutral intermediary in conflict zones. But such attacks may also represent intentional attempts to destabilize the areas concerned.

Even after armed conflict has ended, civilian suffering often continues for years as the widespread possession of fire arms fosters a “culture of violence”, undermines the rule of law and threatens efforts at reconciliation between the former warring parties. A recent study of the ICRC’s medical database on weapons-related casualties showed a decrease in such casualties of only 20-40 % (depending on weapon type) during the eighteen months following the end of armed conflict in one particular region [1]. One might have expected a far more dramatic drop in arms-related death and injury in a post-conflict period.

Arms Transfers and Availability – ICRC, Red Crescent Report

Given the trends described above, the International Red Cross and Red Crescent Movement has become increasingly concerned with the problem of arms transfers and availability. In 1995, the 26th International Conference of the Red Cross and Red Crescent, which included 135 States party to the Geneva Conventions of 1949, mandated the ICRC to use its firsthand experience to conduct a study on “the extent to which the availability of weapons is contributing to the proliferation and aggravation of violations of international humanitarian law in armed conflicts and the deterioration of the situation of civilians” [2]. This work is currently being carried out on the basis of interviews with a wide variety of current and former field delegates, the ICRC’s medical database and its analysis of international humanitarian law.

The preliminary findings were reviewed by a panel of experts on arms transfers in Oslo in May 1998, with a final report and possible recommendations expected by the end of the year. The Expert Group meeting concluded, *inter alia*, that

“The growth of a culture of violence — encouraged by the easy availability of arms — is a major obstacle to developing peaceful, prosperous and just societies, particularly in countries recovering from violent conflict... The control of arms availability based on humanitarian law, development, human rights and other criteria should be among the international community’s highest priorities.”

The ICRC report will serve as the basis of further discussion at the 27th International Conference of the Red Cross and Red Crescent in November 1999.

In addition to the efforts of the ICRC, other components of the Red Cross and Red Crescent Movement have begun to address arms availability as a matter of humanitarian concern. The December 1997 session of the Council of Delegates, which brings together all National Red Cross and Red Crescent Societies, their International Federation and the ICRC itself, expressed its alarm at “the easy access of combatants and civilian populations unfamiliar with the requirements of international humanitarian law to a wide variety of weapons, particularly small arms, and their frequent use against civilian populations and in violation of basic humanitarian principles” [3]. It called on the Movement to develop over the next two years a unified position on arms transfers and to clarify what role it could play in dealing with the problem. This process will move forward on the basis of the upcoming ICRC study and broad consultations within the Movement.

In a preliminary assessment of the problems from a humanitarian perspective caused by arms transfers, the ICRC made a number of observations and suggestions which will provide a conceptual framework for its forthcoming study on arms availability [4]. These may be summarized as follows:

— The unregulated transfer of weapons and ammunition can heighten tensions, increase civilian casualties and prolong conflicts.

— Because it is largely outside of international control, the current pattern of small arms transfers is a matter of urgent concern.

— While the primary responsibility for compliance with international humanitarian law falls upon the actual users of weapons, States and businesses engaged in production and export bear some responsibility toward the international community for the use made of the weapons and ammunition they sell.

— Although States have an undisputed right under international law to retain armaments required for their security, they also have a solemn moral and legal responsibility, under Article 1 common to the Geneva Conventions of 1949, to “respect and ensure respect” for international humanitarian law. The transfer of arms and ammunition should be examined in this light. States should, in particular, consider whether the sale of weapons and ammunition can be viewed as simply another form of commerce.

— Given the serious threat to compliance with international humanitarian law, to international peace and security and to the social fabric of societies which the unregulated spread and undisciplined use of weapons presents, the ICRC will encourage States to consider the adoption of rules, based on humanitarian law and other criteria, governing the transfer of arms and ammunition.

Distribution of Small Arms

In past decades small arms and light weapons have been almost entirely overlooked as a subject of arms control or even research interest. Attention focused on major conventional, nuclear and chemical weapon systems — where research could be more precise and where the presence of such weapons was considered particularly destabilizing. Meanwhile, the diffusion of tens of millions of small arms — the cause of most death and injury — flourished. In the last two years governments, regional organizations and NGOs have become increasingly involved in considering new mechanisms, including "codes of conduct", to limit small arms proliferation. As they do so they should consider the importance of criteria based on international humanitarian law. It can be argued that humanitarian law is often the body of law most relevant to the stated purpose for which military arms and ammunition are transferred — to fight an armed conflict.

Although some have suggested using the worldwide campaign for a prohibition on anti-personnel landmines as a model for future work on arms availability, any attempt simply to replicate that effort is unlikely to succeed. The appalling suffering caused by anti-personnel mines could be traced to a single small weapon of questionable military utility. The proposed solution — a complete prohibition — was as simple as it was dramatic. And even in the case of anti-personnel mines, decades of continued effort to universalize the "Ottawa Treaty" [5], to clear existing mines and to assist the victims will be required before the process can be said to be entirely successful.

While it is clear that the unregulated availability of weapons and their use to commit violations of human rights and humanitarian law exact a clearly unacceptable price in human terms, finding solutions is far from simple. The supply of small arms currently available in known and in hidden stockpiles around the world is truly enormous. Most of the weapons concerned would not in themselves be considered illegal in humanitarian law terms. Some are held by government armed forces for legitimate purposes; others by groups seeking justice through armed violence and yet others by criminal elements or other civilians who may be simply seeking a measure of personal security in the absence of any other form of protection in situations of extreme violence.

Even in situations where governments wish to limit the flow of armaments onto their territory, considerable resources and regional cooperation will be required. The success of the national moratorium on arms production, import and export being attempted by the government of Mali will require significant investment in police and customs forces which are beyond the capacity of the government to provide without outside help. Even with that help, much cooperation along with similar moratoria by neighbouring States will be required to reinforce Mali's initiative.

Landmines

Despite these differences, certain lessons may be drawn from recent efforts to end the "landmines epidemic". A central element in the landmines campaign was a demonstration of the link between the mines and their victims. The appalling effects of unregulated arms flows before, during and after conflicts will need to be clearly demonstrated in a manner which engages the public conscience. Credible research and its exchange through modern communications technology will be just as important as it was for the work on landmines. Specific and realistic proposals for addressing the problem will need to be advanced, this time as part of a far more multifaceted approach. As was the case with landmines, progress will demand a high level of cooperation and trust among governments, non-governmental organizations and international humanitarian agencies — based on a sense of humanity and common purpose.

In the short term the challenge will be to raise awareness of the human costs of arms availability and to put the issue squarely on the international agenda. It will be necessary to challenge the fatalistic acceptance of daily news reports of armed attacks on civilians for which no one is held responsible. The principle needs to be established that those who supply arms in situations where violations of international law can be expected share responsibility for the use of their weapons.

Codes of Conduct

"Codes of conduct" for arms transfers are one promising approach to developing agreement on what constitutes responsible practice. One such draft code drafted by a group of Nobel laureates led by former Costa Rican President Oscar Arias includes criteria based on international humanitarian law. The European Union integrated a reference on respect for humanitarian law in the code of conduct on arms transfers it adopted in May 1998. The United States Congress is also discussing a code for exports which includes human rights but, not yet, humanitarian law criteria.

Success in reducing the human cost of unregulated arms proliferation will depend on creating a sense of responsibility and accountability among both those who produce and those who use arms. Weapons serve as tools for implementing life-and-death decisions and are instrumental both in enforcing and undermining the rule of law. They cannot be considered as simply another form of commercial goods to be governed by the law of supply and demand.

Notes:

1. David Meddings, “Weapons injuries during and after periods of conflict: retrospective analysis”, *British Medical Journal*, No. 7120, 29 November 1997, pp. 1417-1420.

2. Meeting of the Intergovernmental Group of Experts for the Protection of War Victims (Geneva, 1995), Recommendation VIII, as endorsed by Resolution 1 of the 26th International Conference of the Red Cross and Red Crescent, Geneva, 1995, reprinted in *IRRC*, No. 310, January-February 1996, pp. 88 and 58 respectively.

3. Resolution 8, section 4, Council of Delegates, Sevilla, 1997, reprinted in *IRRC*, No. 322, March 1998, pp. 152.

4. ”Arms Transfers, Humanitarian Assistance and International Humanitarian Law”, ICRC document, 19 February 1998.

5. Convention on the prohibition of the use, stockpiling, production and transfer of anti-personnel mines and their destruction, of 18 September 1997, reprinted in *IRRC*, No. 320, September-October 1997, pp. 563-578.

The SlrUS Project: Towards a Determination of which weapons cause 'Superfluous Injury or Unnecessary Suffering'

ROBIN M. COUPLAND

Contents

1. WEAPONS, LAW, INJURY AND SUFFERING.

1.1 *Weapons: A Health Issue?*

Weapons are, by their design, a health issue.[1]This was recognised at the Montreux Symposium in March 1996[2] and by the General Assembly of the World Medical Association in October 1996. The fact that the medical profession has responsibilities in relation to this health issue was also recognised at both these meetings. These responsibilities range from the gathering of data about the effects of weapons on health, thus making the subject objective

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[1] Robin M Coupland, 'The Effects of Weapons on Health' (1996) 347 *Lancet* 450-1; V W Sidel, 'The International Arms Trade and its Impact on Health' (1995) 311 *British Medical Journal* 1677; Don G Bates, 'The Medical and Ecological Effects of Nuclear War' (1983) 28 *McGill Law Journal* 717.

[2] The International Committee of the Red Cross, 'The Medical Profession and the Effects of Weapons: The Symposium, Geneva' (1996) ('*ICRC Symposium*').

and understandable, to advocating limits on means of warfare by invoking international humanitarian law and to educating governments, the public and the military about the effects of weapons.

Examination of the effects of weapons on health clarifies legal considerations relating to technology and use of weapons. To limit more effectively the human suffering caused by weapons both current and future, the nature of that human suffering must be understood and quantified. It has been pointed out that objective criteria for measuring suffering would provide a useful tool for lawyers.[3] It has also been noted that, in relation to chemical and biological weapons, there is no objective definition of what makes any particular weapon 'abhorrent',[4] although this has not prevented the signing of treaties prohibiting the production and use of these weapons.

1.2 *An Important Distinction: Design and Use of Weapons*

When a weapon is used against human beings the factors that determine its effects on health relate to both the design of the weapon and the way it is, used. The nature of the injury caused is closely related to the design of the weapon. How many people are injured and who is injured are determined largely by the use of the weapon. Which part of the body is injured may relate to either the design of the weapon or its use. A modern rifle may be used to inflict bullet wounds, each wound representing the deposit of energy of up to 2,500 joules to the human body;[5] this wounding capacity is the foreseeable effect resulting from the design of the weapon. When such bullets are fired indiscriminately into a crowd or aimed by a sniper at the head of specific individuals, factors relating to use come into play which determine who is injured, their mortality and, for example, the "proportion of wounded with limb injuries. By contrast, a 'point-detonating' (buried) anti-personnel mine, when triggered by foot pressure, causes traumatic amputation of the foot or leg -a foreseeable effect resulting from the design; user-dependent factors determine, for example, the number and category of people injured. Retinal haemorrhage from a blinding laser weapon is obviously a design-dependent effect. The distinction between design-dependent effects and user-dependent effects is central to this document, which focuses exclusively on the design-dependent, foreseeable effects of weapons.

An examination of the design-dependent, foreseeable effects of weapons must include the question as to whether a weapon can be inherently indiscriminate in its effects. A weapon which injures combatants and non-combatants alike usually does so as a result of user-dependent factors. However, indiscriminate effect may be design-dependent;[6] a topical example being anti-personnel mines.[7] This aspect of the design of weapons is not examined

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[3] *Ibid*. See also Robin M Coupland (ed), *The SIrUS Project: Towards a Determination of Which Weapons Cause' Superfluous Injury or Unnecessary Suffering'* (1997).

[4] The ICRC Symposium, above n 2, 28.

[5] Karl G Sellier and Beat P Kneubuehl, *Wound Ballistics and the Scientific Background* (1994) 341-5.

[6] A weapon which is inherently indiscriminate in its effects is one which affects combatants and non-combatants without distinction, ie even when aimed at or used for a military objective, it will affect civilians in a way that the aimer or user cannot control.

[7] See Robin M Coupland and A M Korver, 'Injuries From Antipersonnel Mines: The Experience of the International Committee of the Red Cross' (1991) 303 *British Medical Journa1* 1509; A Ascherio et al, 'Deaths and Injuries Caused by Landmines in Mozambique' (1995) 346 Lancet 721; N Andersson, C Palha da Sousa and S Paredes, 'Social Cost of.Landmines in Four Countries: Afghanistan, Bosnia, Cambodia and Mozambique' (1995) 311 *British Medical Journal* 718; S Jeffrey,, Anti-Personnel Mines: Who are the Victims?' (1996) 13 *Journal of Acccident Emergency Medicine* 343.

further here. There are legal instruments to limit the indiscriminate use of weapons; the same instruments also cover weapons, which as a function of their design, are indiscriminate in their effects.

1.3 *Weapon Design and International Law*

The concept that States' right to choose methods and means of warfare is not unlimited has been generally recognized in treaties and custom for centuries. The most important treaty reaffirming the concept is the Hague Regulations of 1907;[8] this rule was recognised as reflecting customary international law by the Nuremberg Tribunal;[9] more recently, the International Court of Justice recognized its customary international law nature. [10] The most recent treaty to recognise this principle is Additional Protocol I[11] to the Geneva Conventions of 1949.[12]

These treaties and others enshrine the concept that any weapon system should not be of a nature to inflict 'superfluous injury or unnecessary suffering'[13] beyond the military purposes of the user and should.not render death inevitable. Whether the effects of a weapon might constitute 'superfluous injury or unnecessary suffering' on the part of the victim have, up to now, remained within the realm of emotional reaction or philosophical argument.

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[8] *Convention Concerning The Laws and Customs of War on Land (Hague Convention IV),* signed at The Hague, 18 October 1907, 205 CTS 277.The Regulations are Annexed to the Convention ('The Hague Convention').

[9] The International Military Tribunal for the Prosecution and Punishment of Major War Criminals of the European Axis, established pursuant to *the Agreement for the Prosecution and Punishment of Major War Criminals of the European Axis, (London Agreement),* 8 August 1945,82 UNTS 279. The Charter of the International Military Tribunal is appended to the Agreement (‘*The Charter of the IMT*’).

[10] *The Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion of 8 July 1996*, [1996] ICJ Rep 226,35 ILM 809 ('*The Advisory Opinion of the ICJ*'). For an analysis of this case, see Louise Doswald-Beck, 'International Humanitarian Law and the Advisory.Opinion of the International Court of Justice on the Threat or Use of Nuclear Weapons' (1997) 316 *International Review of the Red Cross* 35; Eric David, 'The Opinion of the. International Court of Justice on the Legality of the Use of Nuclear Weapons' (1997) 316 *International Review of the Red Cross* 21.

[11] *Protocol Additional to the Geneva Convention of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts*, 1125 UNTS 609; 16 ILM 1442 (entered into force on 7 December 1978) (‘*Additional Protocol*’). As of 17 March 1999, there were 153 States Parties.

[12] *Geneva Convention for the Amelioration of the Condition of the Wounded and the Sick in Armed Forces in the Field*, 75 UNTS 31 *('First Geneva Convention'); Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea*, 75 UNTS *85 ('Second Geneva Convention'),. Geneva Convention Relative to the Treatment of Prisoners of War,* 75 UNTS *135 ('Third Geneva Convention'); Geneva Convention Relative to the Protection of Civilian Persons in Time of War*, 75 UNTS 287 *('Fourth Geneva Convention') All these conventions entered into force 21 October 1950, and as at 17 March 1999, there were 188 States Parties.*

[13] This concept is to be found in the preamble to the *Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight*, opened for signature 29 November/11 December 1868, 138 CTS 297; (1907) 1 *American Journal of International Law* (Supp) 95 (entered into force 29 November/11 December 1868*) ('St Petersburg Declaration'),* but was not formulated until 1899 in *the Regulations Respecting the Laws and Customs of War on Land,* annexed to the *Hague Convention II of 1899, Declaration Concerning the Prohibition of the Use of Projectiles Diffusing Asphyxiating Gases* (signed at The Hague, 29 July 1899), 26 Martens (2d) 998 ('First Hague, IV, 2'*); Declaration Concerning the Prohibition of the Use of Expanding Bullets*, (signed at The Hague, 29 July 1899), 26 Martens (2d) 1002. In the English translation of these Regulations, the expression *'maux superflus'* was translated by *'superfluous injury'*; in the 1907 revised version this was replaced by the term 'unnecessary suffering'. Since 1977 'superfluous injury or unnecessary suffering' has been generally adopted as a more appropriate translation. For an in-depth study into the concept of superflous injury, see Henri Meyrowitz, 'The Principle of Unnecessary Suffering' (1994) 299 *International Review of the Red Cross* 98.

The first international treaty relating to the design of weapons was the St Petersburg Declaration of 1868, which on a proposal made by the Russian Tsar, banned bullets which explode on impact with the human body. Similar treaties were the Hague Declaration of 1899, which banned the use of dum-dum bullets, the Geneva Protocol of 1925,[14] which banned the use of chemical and biological weapons, the Biological Weapons Convention of 1972[15] and the Chemical Weapons Convention of 1993.[16] (The use of poison or poisoned weapons has been banned by customary law for centuries.) Adoption of these treaties was not based on an objective analysis of the suffering caused by the weapons concerned; such means of warfare were simply deemed 'abhorrent' or 'inhuman'. It is important to note that these notions originated with and were promoted by politicians and senior military figures out of concern for the effects that such weapons might have on their troops.

Applying the principles of these treaties to existing weapons is difficult; applying them to weapons under development is even more difficult. As weapon systems being developed for potential military use have differing effects on the human body and may not inflict injury by physical means (transfer of kinetic energy), it is essential that some yardstick of injury and suffering be created against which the effect of any weapon can be measured.

Another pertinent element of existing law is the Martens clause.[17] This 'originated in the first Hague Peace Conference in 1899, was repeated at the second Peace Conference in 1907 and has been carried forward into Additional Protocol I. It states that civilians and combatants 'remain under the protection and the rule of the principles of the law of nations, as they result from the usages established among civilized peoples, from the laws of humanity and the dictates of the public conscience.'[18]

That the Martens clause now constitutes an element of customary international humanitarian law has been recognised in the Advisory Opinion of the ICJ on 8 July 1996.[19] 1n addition, the extent to which policy-makers are influenced by strong public opinion on any issue is now fully recognized. The effect on governments of the publicity campaigns securing a ban on anti-personnel mines is evidence of this.

2. HEALTH PROFESSIONALS, WEAPONS AND THE LAW

Legislation on many health-related issues originates with the collection of data that make the relevant concerns understandable and objective; controls on cigarette advertising and the compulsory wearing of seat belts are examples. In the same way, determination of which effects of weapons constitute 'superfluous injury or unnecessary suffering' requires input of health-related data. Injury and suffering are health issues and so health professionals are in a

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[14] *Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous, or other Gases and Bacteriological Methods of Warfare,* (opened for signature 17 June 1925),94 LNTS65; 26 UST 571 (entered into force 8 February 1928) (*'Geneva Gas Protocol'*).
[15] *Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction*, (signed on 10 April 1972), as at 17 March 1999, there were 141 States Parties; 11 ILM 320; 1971 *UN Juridical Yearbook* 118 ('BWC').
[16] *United Nations Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction*, opened for signature 13 January 1993; 32 ILM 800 (entered into force 29 Apri11997) ('CWC'). As at 31 December 1998, there were 121 States Parties.
[17] Hague Convention IV, Preamble [6]-[8].
[18] Hague Convention IV, Preamble [8].
[19] Advisory Opinion of the ICJ, [78].

position to help lawyers, governments and the public to decide, on the basis of objective criteria, what is superfluous or unnecessary. Using medical data and arguments to support existing law is a responsibility of the medical profession; this has been recognized b)" the World Medical Association. Another responsibility of the medical profession is to educate the public about health issues.

The effects of weapons on health should be the basis for legal, ethical, technical and political decisions with respect to weapons; in other words, what weapons really do to human beings should be the lowest common denominator for different professional concerns. This can be demonstrated by examining the focus on bullet construction as a means of limiting human damage in warfare. Dum-dum bullets, which have an exposed lead tip and so splay open on impact with the body, were prohibited in 1899 on moral grounds because of the large wounds they caused. However. technology can circumvent the law by, for example, giving 'legal' bullets a higher velocity and thus the potential to produce the same large wounds. This century, many wound ballistic studies have been performed which have fuelled legal debate about bullet construction. If the effects on health of small arms, which are measurable by a clinical wound classification,[20] or can be modelled in a laboratory,[21] were used as the basis for considering bodily harm, the international law governing means and methods of warfare would not get bogged down in technical specifications for bullet construction; scientist, designer, lawyer, soldier and surgeon would have a common point of understanding. A recent and significant legal development is the 1995 Protocol to the Convention on Certain Conventional Weapons, which prohibits the use of laser weapons designed specifically to cause blindness.[22] This is important because it applies to a weapon before that weapon's effects have been observed on the battlefield. However, other 'optical munitions' have been developed which could be used specifically to blind people in war.[23] Although these examples show how politicians agree that there should be a limit to the means and methods of warfare, the prohibition of dum-dum bullets and blinding laser weapons exposes a fundamental defect in this part of international law. In both cases, it is the technology of a weapon that has been prohibited and not its foreseeable effect on human beings. Bullets causing large wounds should have been prohibited in 1899; intentional blinding as a method of warfare should have been prohibited in 1995. In brief, the objective of international law in relation to the design of weapons is to prevent certain adverse or excessive effects on health; prohibition of the use of certain technologies may not suffice.

3. THE SIRUS PROJECT

The principal element of the SIrUS Project is the idea that the effect of a weapon should be considered before its nature, type or technology; this is a reversal of current thinking. The

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[20] See Robin M Coupland, *The Red Cross Wound Classification* (1991); Robin M Coupland, 'The Red Cross Classification of War Wounds: The EXCFM Scoring System' (1992) 16 *World Journal of Surgery* 910.

[21] Beat P Kneubuehl, 'Small Calibre Weapon Systems' *in Expert Meeting on Certain Weapon Systems and on Implementing Mechanisms in International Law* (1994) 26-39.

[22] *Additional Protocol to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects* (Protocol on Blinding Laser Weapons), opened for signature 13 October 1995; 35 ILM 1218 (entered into force 30 July 1998) (*'Protocol IV to the 1980 Weapons Convention'*). As at 28 October 1998, there were 30 States Parties. See also Louise Doswald-Beck (ed), *Blinding Weapons* (1993); 'Weapons Intended to Blind' (Editorial) (1994) Lancet 1649-50.

[23] Anonymous author, 'Non-Lethal Weapons: Emerging Requirements for Security strategy' in *The Institute for Foreign Policy Analysis* (1996) 27; N Lewer and S Schofield, *Non-Lethal Weapons: A Fatal Attraction?* (1997) 10-11.

project has involved a group of experts in the areas of weapons, medicine, law and communications, whose work proceeded in three stages. First, they collated data relating to the effects of conventional weapons;[24] second, they used this data as a baseline for the consideration of the effects of all weapons; third, they defined four criteria which make an objective distinction between what constitutes and what does not constitute the effects of conventional weapons.[25] They now propose these criteria as a basis for determining which effects of weapons constitute 'superfluous injury or unnecessary suffering' and request endorsement of this proposal by professional and academic bodies.

States have an obligation to determine the legality of any new means and method of warfare they are procuring or developing. The objective of the SIrUS Project is to facilitate such determination without legal wrangling about certain technologies.

4. THE EFFECTS OF CONVENTIONAL WEAPONS: A STUDY

4.1 *Introduction*

The effects of projectiles and explosions on individuals can be documented by using the Red Cross wound classification.[26] In a clinical setting, this classification has been used to document the incidence of bullet disruption in armed conflict[27] and the categories of wounds caused in civilians by hand grenades,[28] and to refine the wounds of people injured by fragments or bullets according to structures injured and extent of tissue damage.[29] From the score given to any wound its grade, which denotes its size and so reflects energy deposit, can be computed: Grade 1 denotes skin wounds of less than 10 cm without a cavity; Grade 2 denotes skin wounds of less than 10 cm but with a cavity; Grade 3 denotes skin wounds of 10 cm or more with a cavity. It is not possible to establish a precise correlation between grade and energy deposit nor between grade and type of weapon. However, handgun bullets usually inflict Grade 1 wounds and deposit up to 500 joules of energy.[30] A close-range shotgun wound or a wound from a dum-dum bullet will invariably be of Grade 3 and is associated with deposit of more than 1,500 joules of energy.[31] Modem assault rifles can inflict all grades of wound, depending on range, bullet construction and length of the sound track ID the body. Fragments of shells, bombs, grenades and mortars are capable of inflicting all three grades of wounds, depending on their mass and velocity.

[24] There is no formal definition of 'conventional weapons'; in this chapter, the term refers to weapons which are currently in use by armies and which utilize projectiles or (non-nuclear) explosions.
[25] In this document, the term 'effects of conventional weapons' does not include those of 'point-detonating' anti-personnel mines.
[26] See Coupland, above n 20.
[27] Robin M Coupland et al ' Assessment of Bullet Disruption in Armed Conflict' (1992) 339 *Lancet* 35.
[28] Robin M Coupland, 'Hand Grenade Injuries Among Civilians' (1993) 270 *Journal of the American Medical Association* 624-6.
[29] Ibid; G W Bowyer, M p M Stewart, J M Ryan, 'Gulf War Wounds: Application of the Red Cross Wound Classification' (1993) 24 *Injury* 597; G W Bowyer 'Mghan War Wounded: Application of the Red Cross Wound Classification' (1995) 38 *Journal of Trauma* 64; M p M Stewart and A Kinninmouth, 'Shotgun Wound of the Limbs' (1993) 24 Injury 667; Robin M Coupland, 'Classification and Management of War Wounds' in C D. Johnson and I Taylor (eds), Recent Advances in Surgery 17 (1994) 121-34; J Savic et al 'Glucose as an Adjunct Triage Tool to the Red Cross Wound Classification' (1996) 40 *Journal of Trauma* 144.
[30] See Sellier and Kneubuehl, above n 5 341-5.
[31] Ibid.

It is also possible to measure the collective effects of weapons by determining, for example, the mortality caused by a weapon system in the field (in military terms: 'killed in action'), the proportion of casualties who die after reaching a medical facility ('died of wounds'), hospital mortality, the number of days the survivors stay in hospital, the number of operations they require, the number of units of blood they need during treatment, or the proportion of survivors with a particular residual disability.

The ICRC's wound database grew out of a simple system of data collection which was originally designed to give an indication of the activities of independent ICRC hospitals. Included in the information recorded for each patient is the cause of injury, the time lapse between injury and admission, the wound classification, the region or regions injured, whether the patient has died in hospital, the number of operations, the number of units of blood required, the number of days spent in hospital, and whether the patient was discharged with amputation of one or both lower limbs. This method of data collection was introduced in January 1991. Since then, all war-wounded patients who have been admitted to the ICRC hospitals in Peshawar and Quetta (Pakistan/Afghan border), Kabul (Afghanistan), Khao-I-Dang (Thai/Cambodian border), Butare (Rwanda) and Lokichokio (Kenyan/Sudanese border) have had a data form filled out on their death or discharge from surgical wards as part of the hospital routine. The database currently contains data relating to 26,636 patients, of whom 8,805 (33.1%) were females, males less than 16 years old or males of 50 years or more a d hence were unlikely to have been combatants.

There is inevitably an unknown proportion of forms that are not filled out correctly; an enormous effort has been made to reduce this proportion to a minimum. The readiness of surgeons to score wounds according to the Red Cross wound classification is variable. Some patients lie about the ca se of their injuries to gain admission to hospital or may not know ex ctly what injured them. Because of the constraints imposed on the co lection of these data under field conditions, their 'validity' and 'reliability' have not been ascertained by formal independent means.

4.2 *Method*

The patients' data were analysed by cause of injury. 'Fragment' indicates injury from shell, bomb, grenade or mortar. 'Bullet' indicates any gunshot wound. 'Mine injury' refers to any person admitted as a result of a mine explosion, whether anti-tank or anti-personnel mine. 'Burn' indicates burn injury from any cause. 'Mine causing amputation' is a subgroup of all the mine-injured but is taken to correspond broadly to those who have stepped on a 'point-detonating' anti-personnel mine.[32]

For patients with fragment and bullet wounds and for whom a wound s ore according to the Red Cross wound classification was recorded, the grades of the first or only wound scored were computed. Site or sites of injury (head/neck, chest, abdomen, back, pelvis/buttocks, right upper limb, left upper limb, right lower limb and left lower limb) for those admitted to hospital within 24 hours were analysed according to cause of injury.

For those injured by fragments, bullets, burn or mines and who were admitted to hospital within 24 hours, hospital mortality was computed. For the surviving patients of the same group the following were computed: average number of days spent in hospital (this is the

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number of days to surgical discharge, excluding the portion of stay of those who had to wait in hospital for political or geographical reasons); average number of operations required; proportion of patients transfused, average number of units of blood transfused; total number of lower limbs amputated (this is not given as a proportion of all patients because of the small number who had bilateral lower limb amputation). Those injured by mines and who arrived with traumatic amputation or who subsequently underwent surgical amputation were analysed as a subgroup of all mine injuries. In this part of the study only data from patients who were admitted within 24 hours of injury were analysed, so those who had delayed access to medical care did n t influence the results.

4.3 *Results*

Table 1 shows the proportion of the grades of the first wound scored on the records of 8,295 patients injured by fragments or bullets.

Table 1

	Grade 1	*Grade 2*	*Grade 3*
Fragments (shell, bomb, grenade, etc.) (3.157 patients)	1841 (58.3%)	1054 (33.4%)	263 (8.3%)
Bullets (5,138 patients)	2333 (45.4%)	2296 (44.7%)	509 (9.9%)

The proportion of grades of the first wound scored by the Red Cross wound classification in 8, 295 patients injured by fragments and by bullets. The classification and the significance of the grade of the wound is explained in the text. The 95% Confidence Interval (CI) on the presence of Grade 3 wounds resulting from fragments is 7.3; that for wounds from bullets is 9.1% to 10.7%.

Table 2 shows hospital mortality according to cause of injury in 8,762 patients who were admitted within 24 hours of injury.

Table 2

Cause of Injury	*Number of patients*	*Number dies (mortality %)*
Fragments	2926	118 (4.0%)
Bullet	2706	124 (4.6%)
Burn	102	19 (18.6%)
Mine	3028	121 (4.0%)
Mine causing amputation	890	55 (6.2%))

Mortality in 8, 762 patients admitted to independent ICRC hospitals within 24 hours of injury according to cause of injury, "Mine" = all mine-injured patients. "Mine causing amputation" = patients who arrived with a traumatic amputation or who underwent surgical amputation; it is a subgroup of all the mine-injured.

The percentages dying by cause of injury are different (χ^2=51.83 on 3 d.f., $p<0.001$). The percentages dying from fragments, bullets and mines are not significantly different from e~ch other as shown by partitioning of the chi-square statistics (χ^2=1.50 on 2 d.f., $p>0.05$), confirming that the overall significance is due to the high proportion dying from burns.

Table 3 shows the regions injured according to wounding agent in 8,660 non-burn patients admitted within 24 hours of injury.

Table 3

``	*Number of Patients*	*Number of regions injured*	*Regions injured per patient*	*Central injuries (% all injuries)*	*Upper limb injuries (% all injuries)*	*Lower limb injuries (% all injuries)*
Fragments	2,926	5,531	1.9	43.5	23.8	32.6
Bullet	2,706	3,491	1.3	45.2	20.2	34.5
Mine	3,028	7,282	2.4	27.8	27.2	44.9

The number and distribution of wounds in 8,660 patients admitted to independent ICRC hospitals within 24 hours of injury according to cause of injury. "Central injuries" = wounds of the head/neck, chest, abdomen, back, buttocks/pelvis.

The distribution of the sites of injury is very different for the different types of weapons. (patients frequently had multiple injuries, so the standard chi-square test is not computed due to non-independence of data,) Inspection shows that the proportion of lower limb injuries due to mines was much higher than for the other two types of weapon.

Table 4 shows, for the 8,380 patients surviving to discharge and according to cause of injury: average number of days spent in hospital; average number of operations; proportion of patients transfused; average volume of blood transfused in units; number of lower limbs amputated.

Table 4

	Total Survived	*Mean days in hospital*	*Mean number of operations*	*Proportion transfused (%)*	*Mean units of blood given*	*Number of lower limbs amputated*
Fragments	2,808	14.3	1.9	14.1	0.4	63
Bullet	2.582	19.1	2.1	15.9	0.5	20
Burn	83	18.8	1.7	8.4	0.3	1
Mine	2,907	22.3	2.8	33.6	1.3	915
Mine causing amputation	835	32.9	4.0	74.9	3.1	915

Data from 8,380 war-wounded patients who survived, showing days in hospital, operations per patient, blood transfusion and lower limb amputation. All patients were admitted to independent ICRC hospitals within 24 hours of injury. The number of lower limb amputations is not given as a percentage of all 'patients because of the few requiring bilateral amputation. "Mines" = all mine-injured patients who survived; "Mine causing amputation" =,those mine-injured who survived with either a below-knee amputation, an above-knee amputation or bilateral lower limb amputation. The percentage of patients receiving transfusion were significantly different across the different causes of injury (X2=401.3 on 3 d.f. p<0.001). By far the highest proportion was in the mine-injured, the excess being almost wholly due to amputation.

4.4 *Discussion*

When patients are admitted to an ICRC hospital, their military status is neither ascertained nor recorded. The fact that at least 33% of the patients could be presumed to be 'non-combatants' reflects the reality of modern conflicts. There are no means of establishing how many die before reaching hospital.

Table 1 shows that for those patients injured by either fragments or bullets, the proportion with Grade 1 wounds and Grade 2 wounds differs. However, the corresponding proportion with Grade 3 wounds is similar in both cases and is less than 10%. This establishes a baseline for the proportion of large wounds in those who survived to hospital. The majority of bullet wounds seen in ICRC hospitals are caused by the Kalashnikov AK- 47.

A review of data from military medical sources, who know the number of fatalities in the field, shows how little mortality has changed since World War II[33] The proportion of wounded who die in the field varies between 18% and 22%. Likewise, the proportion of all casualties who die after reaching a medical facility varies between about 2.5% and 4.5%.[34] This gives a baseline proportion of deaths among casualties which has. Been accepted by military and political leaders and lawyers as a consequence of war waged in this period of history.The figures for hospital mortality by cause of injury given in Table 2 are comparable, except for those who suffer burns. As the plight of burn patients in hospital is particularly miserable, this high hospital mortality in ICRC facilities represents a lingering death.

Table 3 shows that the distribution of regions wounded by fragments and by bullets are similar. The higher proportion of lower limb injuries and the lower proportion of central injuries in mine-injured patients reflects the foreseeable effects resulting from the design of these weapons; 'point-detonating' anti-personnel mines cause traumatic amputation of the contact foot or leg and fragmentation mines tend to damage the lower limbs.[35] Table 3 also indicates that, in addition to their predilection for lower limbs, mines injure more regions per wounded person than fragmentation weapons.

'Point-detonating' anti-personnel mines are designed to be triggered by foot pressure and thus cause traumatic amputation of a lower limb (a Grade 3 wound). Table 4 shows that mines are a much greater drain on hospital resources as compared with other conventional weapons, and inflict permanent and severe disability on anyone who survives injury. Days spent in hospital, the number of operations and the requirement for blood transfusion are all greater in this group -a reflection of the volume of severe tissue damage which the surgeon must treat.[36] Combining these foreseeable and measurable effects with the fact that ejected fragmentation mines cause 100% mortality among those that trigger them[37] not only raises the question of 'superfluous injury or unnecessary suffering' in relation to the design of anti-personnel mines,[38] but could also support the argument that 'point-detonating' anti-personnel mines should be put in a separate category from other conventional weapons because of their foreseeable effects on health.

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[33] M A Melsom, M D Farrar and R C Volkers, 'Battle Casualties' (1975) 56 *Annals of the Royal College of Surgeons, England* 287; R F Bellamy, 'The Medical Effects of Conventional Weapons' (1992) 16 World Journal of Surgery 888 ('Bellamy 1992'); R F *Bellamy*, 'Combat Trauma Overview' in R Zaitchuk and C M Grande (eds), *Anaesthesia and Preoperative Care of the Combat Casualty* (1996) (, *Bellamy* 1996').

[34]Ibid. See also Robin M Coupland, 'Epidemiological Approach to the Surgical Management of the Casualities of War' (1994) 308 British Medical Journal 1693.

[35]See Coupland and Korver, above n 7.

[36]Ibid. See also B Eshaya-Chauvin and Robin M Coupland, 'Transfusion Requirements for the Management of War Wounded: The Experience of the International Committee of the Red Cross' (1993) 71 *British Journal of Anaesthesia* 172.

[37] D B Adams and C W Schwab, 'Twenty One Year Experience With Land-Mine Injuries' (1988) 28 *Journal of Trauma* 159.

[38] Cornelio Sommargua, 'Does the Nature of Mine Injuries Also Justify a Total Ban?', *Landmines: Demining News From the United Nations* (1996) 11.

The surgical facilities of the ICRC, as a matter of policy, work with a basic level of technology, non-specialist surgery, and no onward evacuation to other facilities; emphasis is surgical management.[39] These facilities often give a better standard of care than is available in the countries where war is being fought and may even represent a 'best-case' scenario. Hospital mortality differs little from that reported in military publications.[40] In terms of meeting medical and surgical needs for treating explosive and missile wounds these hospitals provide a baseline standard of care. However, the medical facilities required to improve survival in cases of burn injury simply cannot be made accessible to victims of modern wars without enormous input in terms of funds and specialized personnel.

4.5 *Conclusions*

The Study shows some of the foreseeable and measurable effects of conventional weapons on human beings. These effects stem from two important features which distinguish conventional weapons (except 'point-detonating' anti-personnel mines) from all others: first, they exert their effects by physical injury to the tissues of the human body; second, excluding user-dependent f-actors, there is a randomness as to which part of the body is injured. A series of baselines relating to injury and suffering resulting from the effects of conventional weapons, including a baseline of treatment requirements, is established The data pertaining to the effects of 'point-detonating' anti-personnel mines show how their foreseeable effects differ measurably from those of other conventional weapons and that these different effects can only be design-dependent.

5. A PROPOSAL FOR DETERMINATION OF WHICH WEAPONS CAUSE 'SUPERFLUOUS INJURY OR UNNECESSARY SUFFERING'

5.1 *A Combination of Concepts*

The proposal for determination of which design-dependent, foreseeable effects of weapons constitute 'superfluous injury or unnecessary suffering' assumes that:

- the effect of a weapon resulting from its design rather than the weapon's nature, type or technology is the primary consideration;
- the effects of all weapons both on individuals and on groups of people are measurable;
- the effects of conventional weapons on health which are well documented, provide a reference baseline or yardstick for determining the foreseeable effects of all weapons when used against human beings;
- the degree of suffering caused by a weapon is increased if there is no treatment available.

The effect of a weapon on any individual may be described and certain parameters of injury measured; however, these may not reflect the effect on all individuals. The collective effects

[39] Robin M Coupland, *War Wounds of Limbs: Surgical Management* (]993) 12-35; see also R C Gray, *War Wounds: Basic Surgical Management* (1994).
[40] See Melsom, Farrar and Volkers, above n 33; Bellamy 1992, above n 33.

measured in groups of people wounded by the weapon in question has significance:[41] it reflects more accurately the foreseeable effect of the weapon resulting from its design when in normal use. The study described above demonstrates some of the foreseeable and measurable effects of conventional weapons on both individuals and groups. This is the best index of injury and suffering available and, up to now, neither law nor public opinion in general have wanted to prohibit these weapons because of their design-dependent effects. The basis of the SIrUS Project is the use of data relating to the effects of conventional weapons to determine what is not 'superfluous injury or unnecessary suffering'. Any other foreseeable effects of weapons would therefore constitute 'superfluous injury or unnecessary suffering'.

5.2 *The Proposal of the SlrUS Project*

The proposal is that what constitutes 'superfluous injury and unnecessary suffering' be determined by design-dependent, foreseeable effects of weapons when they are used against human beings and cause:

- specific disease, specific abnormal physiological state, specific abnormal psychological state, specific and permanent disability or specific disfigurement (Criterion 1); or
- field mortality of more than 25% or a hospital mortality of more than 5% (Criterion 2); or
- Grade 3 wounds as measured by the Red Cross wound classification (Criterion 3); or
- effects for which there is no well recognized and proven treatment (Criterion 4).

The criteria thus combine to form a clear picture of injury and suffering that is not the equivalent of the effects of conventional weapons. This is the nucleus of the SIrUS Project.

5.3 *An Examination of the Criteria*

Criterion 1 -specific disease, specific abnormal physiological state, specific abnormal psychological state, specific and permanent disability or specific disfigurement

Criterion 1 draws an important distinction between the effects of all other weapons and the effects of conventional weapons (except 'point detonating' anti -personnel mines).

The foreseeable psychological effects of weapons have been stressed.[42] Whilst all weapons produce fear and stress, these reactions are neither specific nor abnormal. Criterion 1 would apply to a weapon designed to disorientate, confuse, induce calm or precipitate seizures or psychosis. In the same context, the known neuroendocrine response to physical trauma from conventional weapons is part of their effects.[43] The same neuroendocrine response produced by an agent or energy form without physical injury would represent a specific and abnormal physiological response.

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[41] See, Coupland and Korver, above n 7; Coupland, above n 28; Bellamy 1992, above n 33; Coupland, above n 34; R M Garfield and A I Neugut, 'Epidemiological Analysis of Warfare: A Historical Analysis' (1991) 226 *Journal of the American Medical Association* 688.

[42] ICRC Symposium, above n 2,36-7; Doswald-Beck,above n 22,258-313.

[43] Savic, above n 29; I Cemak, J Savic and A Lazarov, 'Relations Among Plasma Prolactin, Testosterone and Injury in War Casualties' (1997) 8 *World Journal of Surgery* 240, 240-6.

Conventional weapons do not generate an absolute necessity for blood transfusion, as shown in the study. Criterion 1 would apply to any weapon which, for example, foreseeably causes gastrointestinal haemorrhage for which a blood transfusion would be needed. The implications of the need for blood transfusion are particularly important; without a reliable and safe blood bank, which is difficult to establish in a war zone, there is a risk of transfusing blood that has not been cross-matched or tested for communicable diseases such as syphilis, hepatitis B and HIV (the virus causing AIDS).[44]

The need for multiple operations compounds the suffering from the effects of weapons; patients wounded by conventional weapons do not require, on average, more than three operations in a non-specialized surgical facility. Thus a weapon which, for example, causes facial disfigurement as a foreseeable effect would give rise to the need for multiple reconstructive operations in a specialized facility. Criterion 1 would apply, possibly in combination with Criterion 4.

Criterion 2 -field mortality of more than 25% or hospital mortality of more than 5%

The use of weapons whose design renders death inevitable is already prohibited as part of the same legal concept that prohibit those causing 'superfluous injury or unnecessary suffering' (Appendix 3). The study shows, for different categories of conventional weapons, how constant the figures are both for field mortality and for later mortality after the wounded person reaches a medical facility.[45] The figures for field mortality and hospital mortality must be considered separately because death from a weapon may occur days or weeks after injury, as is the case with burns and as shown in Table 2 of the study. The figures of 25% and 5% for field and hospital mortality respectively are proposed as limits which are on the conservative side of the established baseline.

Criterion 3 -Grade 3 wounds as measured by the Red Cross wound classification

This criterion is needed to apply to weapons which, without targeting a particular part of the body, simply inflict large wounds. This would be the case for exploding bullets and dum-dum bullets. Table 1 of the study shows that conventional weapons produce less than 10% Grade 3 wounds. This figure would be exceeded by any missile or wave form which carried much more energy and which foreseeably deposited this energy in the human body over a short track.

In an attempt to move law away from an approach focusing on technology -as exemplified by the prohibitions on exploding and dum-dum bullets -towards an approach focusing on effect, the Swiss government has proposed to States a means of testing munitions for their potential to produce large wounds; the application of Criterion 3 to a weapon could be tested in a laboratory.[46]

Criterion 4 -exerts effects for which there is no well recognized and proven treatment

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[44] Eshaya-Chauvin and Coupland, above n 36.
[45] See Melsom, Farrar and Volkers, above n 33; Bellamy 1992, above n 33; Coupland, above n 34; Garfield and Neugent, above n 41.
[46] Kneubuehl, above n 21.

Criterion 4 is closely linked to Criterion 1. For the laser-damaged retina there is no known successful treatment even in the best facilities. The effects of other new weapons are not fully known and so treatment is unlikely to be successful.[47] This criterion. also highlights the imbalance between the finance and technology that goes into the development of weapons on the one hand and, on the other, the comparatively scanty resources that are made available to treat the wounded and record the true effects of weapons on health.

5.4 *Applying the Criteria to Different Weapons*

One or more of the four criteria apply to weapons which are already prohibited: Criterion 1 and possibly Criteria 2 and 4 apply to chemical and biological weapons; Criteria 2 and 3 apply to exploding bullets; Criterion 3 and possibly Criterion 2 apply to dum-dum bullets; Criteria 1 and 4 apply to blinding laser weapons. These criteria also apply to weapons which are subject to either a review of the law pertaining to them or widespread stigmatization: Criteria 1, 2 and 3 apply to 'point-detonating' anti-personnel mines; Criterion 2 and possibly Criterion 1 apply to burning weapons.

Conventional weapons are not necessarily 'lethal'; this is an important point to make when new weapons are considered in the context of the SIrUS Project. The term 'non-lethal' has been applied to a new generation of weapons, implying that technological advances have provided the means to achieve military objectives whilst minimizing deaths and injuries. A variety of energy forms, physical agents and chemicals have been developed along these lines.[48] This concept must be examined carefully from the point of view of the effects of such weapons. The purpose is to "disable" - to inflict disability -but the difficult question of how long the disability will last is not considered. If it is established what energy output, concentration or dose is 'non-lethal' or temporary, one has also discovered what is lethal or permanent. Thus for new weapons the dividing line between 'non-lethal' and 'lethal' may be fine or non-existent. In tactical terms, new weapons will always be backed up by or used in. conjunction with conventional weapons;[49] 'softening the target' may increase the 'lethality' of conventional weapons. In addition, a doctor treating the wounded may have to treat people suffering from the effects of both conventional and 'non-lethal' weapons. All new weapons can and should be considered in terms of their effects and therefore in relation to the four criteria.

With regard to weapons that are designed to blind, it has been argued that it is better to blind an enemy soldier than to kill him or her. This argument fails to take into account the fact that conventional weapons are not 100% lethal, the psychological impact of sudden blindness,[50] the extent of disability, or the impact on a society of its soldiers returning from battle having been irreversibly blinded. Criteria 1 and 4 apply.

Among other 'non-lethal' weapons which should be studied in the context of the SIrUS Project are chemical agents that render a person confused, demotivated or unconscious for a short period without lasting effects. To such a weapon, if it exists, whether Criteria 1 and 4

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[47] Robin M Coupland, '"Non-Lethal Weapons": Precipating a New Arn1s Race' (1997) 315 *British Medical Journal* 72

[48] See Non-Lethal Weapons, above n 23; Lewer and Schofield, above n 23; Coupland, above n 47; M Dando, *A New Form of Warfare: The Rise of Non-Lethal Weapons* (1996).

[49] Non-Lethal Weapons. above n 23; Lewer and Schofield, above n 23.

[50] Doswald-Beck, above 22; See also, E Wittkower and R C Davenport, 'The War Blinded: Their Emotional. Social and Occupational Situation' (1946) 8 *Psychosomatic Medicine* 121.

apply is arguable. However, there are three additional points to consider: first, 'softening the target" is still an important consideration; second, use of such an agent as a method of warfare is already prohibited under the Chemical Weapons Convention; third, a basic principle of pharmacology is that the only difference between a drug and a poison is the dose and it is unclear how the correct dose can be administered on the battlefield.

One cannot consider the effects of weapons in general without referring to nuclear weapons. Here Criteria 1, 2 and 4 would apply (burns and radiation sickness). The nuclear debate, which is discussed extensively in other fora, is not taken further in this document.

When military utility is being assessed, the primary use of the weapon concerned must be taken into account. Weapons used, for example, to disable tanks or ships must be sufficiently destructive for this purpose. Although the crews themselves are protected by the legal concept of 'superfluous injury or unnecessary suffering', they may still suffer severe injuries associated with high mortality when attacked by such weapons.[51] Criterion 2 apparently applies; however, in this context, it cannot be used as a determination of 'superfluous injury or unnecessary suffering' because of the military need to use such weapons. Criterion 1 definitely applies to an agent or energy form which would cause the crew to suffer, for example, epileptic convulsions.

5.5 *Do not all Weapons Cause 'Superfluous Injury or Unnecessary Suffering' ? Is any Weapon Acceptable ?*

Can a weapon cause injury which is not superfluous? Is there such a thing as necessary suffering? These questions pose a moral problem for pacifists, those who believe in complete disarmament and the medical profession.

Use of weapons must generate suffering. Whether use of weapons is necessary is a debate that goes beyond the scope of the SIrUS Project which regards weapons as neither acceptable nor unacceptable. The project represents an attempt to limit the types of weapon that might be used in war; this attempt will fail if the criteria are refuted because they do not represent total disarmament.

The SIrUS Project involves drawing a clear and objective distinction between the effects of conventional weapons and the effects of other weapons. Legal and moral judgement can then be applied to this distinction. Endorsement of the SIrUS Project amounts to recommendation that this distinction be recognized by States in meeting their obligations under international law.

In explaining the effects of weapons in an objective and understandable way to lawyers, governments and the military, the medical profession is making neither a moral nor a legal judgement about weapons. The paper adopted by the General Assembly of the World Medical Association states, 'No weapon is medically acceptable to physicians, but physicians can aid in making effective controls against weapons which cause injury or suffering so extreme as to invoke the terms of International Humanitarian Law'.[52] The SIrUS Project can help the medical profession to avoid making a moral judgement by recommending the

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[51] Bellamy 1992, above n 33.

[52] The World Medical Association Inc, *Proposed World Medical Association Statement on Weapons and their Relation to Life and Health*, 48th WMA General Assembly (1996).

criteria as a means of making a legal judgement. Medical ethics are not breached as this initiative has the potential to prevent specific injury; it is not aimed at preventing all injuries in war.

5.6 *The SlrUS Project and Public Opinion*

Criterion I reflects the question as to whether weapons which target specific biochemical, physiological or anatomical features or weapons which target vital organs or functions should be prohibited.[53] The process whereby knowledge of human form and function is used to develop weapons designed to interfere with that form and function seems to be considered genuinely abhorrent. It is no coincidence then that chemical, biological and blinding laser weapons have been prohibited. This may reflect the distaste for biomedical scientists being involved in weapon design and is linked to the ethical dilemma arising from the fact that much modern weapon design is based on medical knowledge.[54] The measurable and foreseeable effects of conventional weapons provide a baseline, and this baseline pertains to injury and suffering caused by weapons when knowledge of human form and function are not the primary factor in their design. Thus there is an inevitable link between the Martens clause and Criterion I. As there is proven treatment for the effects of few weapons to which Criterion 1 would apply, there is a link between the Martens clause and Criterion 4 also. Weapons from which a soldier cannot take cover, the use of which may not immediately be detected or which poison, heighten the reaction of abhorrence.

Stigmatization of any weapon system is an important factor in reducing the chance of its use; this applies not only to weapons which have been prohibited but also to napalm and to anti-personnel mines which are not, as yet, deemed illegal by all States. Endorsement of the SIrUS Project would provide an objective and precise means of focusing public opinion so that a new weapon whose effect would clearly be 'abhorrent' or 'inhuman, would not have to be deployed before the public conscience is stirred. The SIrUS Project as an element of public opinion runs parallel not only to the obligation of States to determine the legality of any weapon system they are developing but also to the responsibility of the medical profession to educate the public about health matters. The SIrUS Project provides a means for the medical profession to bring weaponry issues objectively into the public domain and at the same time to encourage the international community to recognize the grave implications of continued research and development of new means of warfare.[55]

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[53] ICRC Symposium, above n 2.

[54] lbid. See also, Doswald-Beck, above n 22; E Prokosch, *The Technology of Killing* (1995); Robin M Coupland, 'The Effects of Weapons: Surgical Challenge and Medical Dilemma' (1996) 41 *Journal of the Royal College of Surgeons of Edinburgh* 65.

[55] See, Coupland, above n I; ICRC Symposium, above n 47-9; Lewer and Schofield, above n 23, 24-44. See also Dando, above n 48, Prokosch, above n 54; Coupland, above n 54.

An international ban on anti-personnel mines -
History and negotiation of the "Ottawa treaty"

by Stuart Maslen and Peter Herby*

Contents

The background to the Ottawa process

As the First Review Conference of the 1980 Convention on Conventional Weapons[1] (CCW) closed in Geneva on 3 May 1996, there was widespread dismay at the failure of the States Parties to reach consensus on effective ways to combat the global scourge of landmines. The CCW Protocol II as amended on 3 May 1996[2] (Protocol II as amended) introduced a number of changes that were widely welcomed, but it fell far short of totally prohibiting these weapons, a move already supported by more than 40 States. Keen to sustain the international momentum that might otherwise have slackened, the Canadian delegation announced that Canada would host a meeting of pro-ban States later in the year to develop a strategy to move the international community towards a global ban on anti-personnel mines.

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[1] United Nations Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to have indiscriminate Effects, of 10 October 1980.

[2] Protocol on Prohibitions or Restrictions on the Use of Mines. Booby- Traps and Other Devices as amended on 3 May 1996 (Protocol n as amended on 3 May 1996). Annexed to the CCW, *supra* note 1.

That meeting, the "International strategy conference: Towards a global ban on anti-personnel mines" (usually referred to as "the 1996 or the first Ottawa Conference"), was held in the Canadian capital from 3 to 5 October 1996; it set the scene for what would become known as the "Ottawa -process" -a fast-track negotiation of a convention banning anti-personnel mines. At the closing session of the Conference the host country's Foreign Minister, Lloyd Axworthy, ended his address with an appeal to all governments to return to Ottawa before the end of 1997 to sign such a treaty. This bold initiative was immediately supported by ICRC President Cornelio Sommaruga, who was attending the Conference, by the UN Secretary-General and by the International Campaign to Ban Landmines (ICBL), but it came as a surprise to the governments taking part, and it was by no means certain that it would be successful. Indeed, at that stage only about 50 governments had publicly declared their support for a comprehensive, worldwide ban on anti-personnel mines,[3] and Protocol II as amended was widely considered to be the most stringent international agreement possible in the prevailing climate.

Yet only 14 months later, at the Treaty Signing Forum held in Ottawa in December 1997, representatives of 121 governments queued up to sign the *Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction*,[4]and three of them- Canada, Ireland and Mauritius -also deposited their instruments of ratification. As at the end of Apri11998, there were a total of 124 signatories and 11 States had already ratified the Convention, which will enter into force six months after 40 States have formally adhered to it. The present article aims to discuss this remarkable achievement in the context of the negotiation of the treaty and its various provisions. It also considers some of the implications of the process and its successful outcome for the future development of international humanitarian law. It does not, however, purport to serve as a commentary of the treaty *per se*, a task which is best left to a later date.

The negotiation of the treaty

Only a few weeks after the challenge issued by Canada's Foreign Minister, the Austrian government circulated a first draft of a treaty banning anti-personnel mines. The text was clearly inspired by the negotiations in the First Review Conference of the CCW and by disarmament law, especially the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction, adopted by the UN General Assembly on 30 November 1992. It contained clear prohibitions of the development, production, stockpiling, transfer and use of anti-personnel mines -though it maintained the ambiguous definition of anti-personnel mines contained in Protocol II as amended[5] -and required destruction of stockpiles within one year and clearance of emplaced

[3] Fifty States were full participants at the first Ottawa Conference: Angola, Australia, Austria, Belgium, Bolivia, Bosnia and Herzegovina, Burkina Faso, Cambodia, Cameroon, Canada, Colombia, Croatia, Denmark, Ethiopia, Finland, France, Gabon, Germany, Greece, Guatemala, Guinea, Honduras, Hungary, Iceland, Iran, Ireland, Italy, Japan, Luxembourg, Mexico, Mozambique, the Netherlands, New Zealand, Nicaragua, Norway, Peru, the Philippines, Poland, Portugal, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Trinidad and Tobago, the United Kingdom, the United States, Uruguay, and Zimbabwe. A further 24 countries -Albania. Argentina, Armenia, the Bahamas, Benin, Bulgaria, Brazil, Brunei Darussalam, Chile, Cuba, the Czech Republic, Egypt, the Federal Republic of Yugoslavia, the Holy See, India. Israel, Malaysia, Morocco, Pakistan, the Republic of Korea, Romania, the Russian Federation, Rwanda, and Ukrain –attended as official observers.

[4] Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction, of 18 September 1997, reprinted in IRRC, No.320, September-October 1997, pp. 563-578.

[5] Article 2, para. 3, of Protocol II as amended defines an anti-personnel mine as one "primarily designed to be exploded by the presence, proximity or contact of a person". The use of the phrase "primarily designed" was

anti-personnel mines within five years. In December 1996, the UN General Assembly adopted its landmark resolution 51/45S (157 votes in favour, 10 abstentions and none against) in which States were urged to "pursue vigorously an effective, legally binding international agreement to ban the use, stockpiling, production and transfer of anti-personnel landmines with a view to completing the negotiation as soon as possible."

Thus began the process of negotiating a treaty providing for a comprehensive ban on anti-personnel mines, the target date for its adoption and signature being the end of 1997. A core group of committed governments from different geographical regions began meeting informally to discuss how to push the Ottawa process forward. The Austrian government, which had prepared a draft text in late 1996, hosted a meeting in Vienna from 12 to 14 February 1997 to enable States to exchange views on the content of such a treaty. The Expert Meeting on the Text of a Convention to Ban Anti-personnel Mines (the Vienna Expert Meeting), which was attended by representatives of 111 governments, heard the ICRC outline what it considered to be the key issues at stake. First, the ICRC emphasized the crucial importance of having an unambiguous definition of anti-personnel mines. Second. if a prohibition was to be effective, the new treaty should comprehensively ban the production, -stockpiling, transfer and use of anti-personnel mines and require their destruction. A phased approach should begin with an immediate prohibition on new deployments, production and transfers; a second phase, which should be as short as practical constraints allow, could provide for the destruction of existing stockpiles and the clearance and destruction of mines already deployed.

Third, the ICRC noted that compliance monitoring would be an important element of a regime put in place to end the use of anti-personnel mines, and suggested that the best method would be for an independent mechanism to investigate credible reports of their use following the entry into force of the new treaty. But while advocating the maximum possible degree of verification. the ICRC specifically encouraged States not to allow this question to stand in the way of the basic norm prohibiting anti-personnel mines. It reminded States that earlier norms of humanitarian law prohibiting the use of specific weapons had been enacted without provisions on verification. but this did not prevent them from being very largely respected.

Fourth, the ICRC addressed the issue of universality. Universal application of legal norms is an important objective and the ICRC, in keeping with its mandate under the Geneva Conventions, has devoted a great deal of time and effort to the promotion of existing agreements. It is a fact, however, that no major instrument of humanitarian law has attracted universal adherence from the outset. Indeed. a number of States took decades to ratify the 1925 Geneva Gas Protocol.[6] and in 1899 two of the major powers of the day voted against a prohibition of dum-dum bullets. And yet the vast majority of States have observed the norms laid down by these agreements.

Following the Vienna Expert Meeting, and taking into account the comments made by participating governments, the Austrian government revised its original text and on 14 March 1997 issued its second draft of the *Convention on the Prohibition of the Use, Stockpiling,*

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strongly opposed by the ICRC which feared its abuse in cases where a munition which was clearly an anti-personnel mine could be claimed to have another "primary" purpose.

[6] Geneva Protocol of 17 June 1925 for the Prohibition of the Use in War of Asphyxiating, Poisonous or other Gases and of Bacteriological Methods of Warfare.

Production and Transfer of Anti-Personnel Mines and on their Destruction. The title, and much of the text, would remain the same in the treaty ultimately adopted.

The discussions at the Vienna Expert Meeting had made it clear that the question of verification would give rise to considerable debate, for some governments favoured a humanitarian law approach (i.e., one entailing a minimum of verification) while others sought a complex verification regime similar to those enshrined in negotiated disarmament agreements. Given its interest in the issue of verification, the German government offered to host a meeting devoted exclusively to this question.

The International Expert Meeting on possible Verification Measures to ban Anti-Personnel Landmines (the Bonn Expert Meeting) was held on 24 and 25 April 1997. To stimulate debate on the topic, Germany had drafted an "Option Paper for a possible Verification Scheme for a Convention to Ban Anti-Personnel Landmines". A total of 121 countries were represented at the meeting. and views were again divided between States which felt that detailed verification was essential to ensure that any agreement was effective and those which followed an approach similar to that of the ICRC, arguing that the proposed agreement was essentially humanitarian in character and stressing the overriding importance of a clear norm prohibiting anti-personnel mines.

From 24 to 27 June 1997, the Belgian government hosted the International Conference for a Global Ban on Anti-Personnel Mines (the Brussels Conference), the official follow-up to the 1996 Ottawa Conference. Its primary task was to adopt a declaration forwarding the latest (third) Austrian draft text for negotiation and adoption to the Diplomatic Conference being convened in Oslo, Norway. in September 1997. Out of the 156 States attending the Brussels Conference, a total of 97 signed the "Brussels Declaration", as it came to be known. which affirmed that the essential elements of a treaty to ban anti-personnel mines were:

(a) a comprehensive ban on the use, stockpiling, production and transfer of anti-personnel mines;
(b) the destruction of all stockpiled and cleared anti-personnel mines;
(c) international cooperation and assistance in the area of mine clearance in affected countries.

Notable by their absence from the declaration were references to the importance of international support for assistance to mine victims and to an absolute duty to clear emplaced mines (the duty being only to destroy "cleared" anti-personnel mines).

In addition to forwarding the Austrian draft text to the Oslo Diplomatic. Conference, States supporting the Brussels Declaration also reaffirmed the goal set by the Canadian Foreign Minister of signing the treaty in Ottawa before the end of 1997. The outcome of the meeting was hailed by the ICRC as a major step forward. In the words of its President, "[t]he Brussels Conference has demonstrated that the momentum towards a ban on this pernicious weapon is now irreversible."

The Diplomatic Conference on an International Total Ban on Anti-Personnel Land Mines (the Oslo Diplomatic Conference), convened by Norway, opened in Oslo on 1 September 1997. It was scheduled to last a maximum of three weeks. The host country had already announced the draft Rules of Procedure at the end of the Brussels Conference. Modelled on those used in the negotiation of the 1977 Protocols additional to the Geneva Conventions of 12 August 1949, they provided for resolution of issues by a two-thirds majority vote in cases where consensus proved impossible. Only those States which had formally supported the Brussels Declaration were officially recognized as participants in the Oslo Diplomatic Conference and therefore entitled to vote. All other States present were officially classed as observers, together with the United Nations, the ICRC, the International Federation of Red Cross and Red Crescent Societies, and the ICBL.

The success of the Oslo Diplomatic Conference can be attributed to many factors: the creation and sustenance of the necessary political will, and extensive media attention following the tragic death of Diana, Princess of Wales, are of obvious significance. But the crucial role played by the Chairman of the Conference, Ambassador Jakob Selebi of South Africa, should not be forgotten. With skill and determination he drove the process forward to a successful conclusion without the need for the full three-week negotiation period. His contribution to the favourable outcome of the Ottawa process should be duly recognized.

Key issues in the Ottawa negotiations

The scope of the treaty

The first Austrian draft text contained an article on the proposed scope of the treaty to the effect that the Convention would apply "in all circumstances, including armed conflict and times of peace." The issue of whether such a provision was needed in a treaty entirely prohibiting a weapon was debated at the Vienna Expert Meeting. As a result of those discussions the scope article was dropped from the second Austrian draft, for it was deemed superfluous in an agreement in which States Parties undertook "never under any circumstances" to develop, produce, stock-pile, transfer or use anti-personnel mines.

The lack of such a provision, however, entailed the absence of a specific reference to the application of the treaty to all parties to a conflict. This dashed the hopes of a number of countries, particularly Colombia,[7] and the ICBL that the treaty would expressly regulate the behaviour of all protagonists in a conflict, and not only that of States. However, on signing the Ottawa treaty Colombia stated its understanding that while it had no effect on the legal status of the various parties involved, the Convention applied to all warring parties which are subjects of international humanitarian law (i.e., under Article 3 common to the 1949 Geneva Conventions and their Additional Protocol II of 1977). This understanding was not contested.

In its Article 9 the Ottawa treaty sets out the duty of each State Party to take all appropriate legal, administrative and other measures at the national level to prevent and suppress violations of the Convention. This means that the production, stockpiling, transfer or use of anti-personnel mines by individuals under the jurisdiction or control of States Parties, including members of insurgent forces, are covered, at least in theory. Moreover, one of the preambular paragraphs states that the agreement by the States Parties is based on "the principle of international humanitarian law that the right of the parties to an armed conflict to choose methods or means of warfare is not unlimited, on the principle that prohibits the employment in armed conflicts of weapons, projectiles and materials and methods of warfare of a nature to cause superfluous injury or unnecessary suffering and on the principle that a

[7] See APUCW .46 of 3 September 1997.

distinction must be made between civilians and combatants."[8] These principles are elements of customary international law which apply to all parties to any conflict.

Definitions

(a) Mine

Although it had been suggested that "improvised explosive devices" were regulated as mines under Protocol II as amended, a number of States were keen to ensure that they were encompassed by the Ottawa treaty. The definition of a mine given in Protocol II as amended was therefore supplemented by the expression "designed to be" inserted immediately after the word "munition", so that the new definition read: "a munition -designed to be placed under, on or near the ground or other surface area and exploded by the presence, proximity or contact of a person or vehicle."[9] As a result of an Australian initiative, in the course of the Oslo negotiations on definitions it was accepted that the Convention also prohibited explosive devices improvised or adapted to serve as anti-personnel mines (i.e., if a device functions as an anti-personnel mine, it is to be considered as such).

(b) Anti-personnel mine

The definition of anti-personnel mines was inevitably one of the most highly charged issues. The definition given in Protocol n as amended was unnecessarily ambiguous, a fact recognized even by some of those States , which were in favour of keeping it in the new treaty .At the Vienna Expert Meeting opinions appeared fairly evenly divided as to whether the wording contained in the first Austrian draft should be maintained or amended. The ICRC and the ICBL, for their part, made a strong call for the word "primarily" to be removed from the definition.

In the months following the Vienna Expert Meeting, however, more and more States -particularly those most active in the Ottawa process -espoused the view that the definition of anti-personnel mines had to be clarified. Accordingly, in its second draft text the Austrian government removed the term "primarily" from the definition and included an exemption for anti-vehicle mines equipped with anti-handling devices.[10] The phrase on anti-handling devices mirrored the text of an interpretative statement made by Germany and more than 20 other delegations at the adoption of Protocol n as amended concerning the meaning of the word "primarily".

At the Brussels Conference a number of States, such as Ethiopia, commented favourably on the removal of the word "primarily" from the text. Others, such as Sweden and the United Kingdom, concerned by an apparent discrepancy with the definition contained in Protocol n as amended, indicated that they might wish to discuss the definition further .

Indeed, at the Oslo Diplomatic Conference there was considerable debate on the issue. The United States, for instance, sought to include an exception for anti-personnel mines contained

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[8] 11th preamble paragraph.
[9] Article 2, para. 2.
[10] "Mines designed to be detonated by the presence, proximity or contact of a vehicle, as opposed to a person, that are equipped with anti-handling devices, are not considered anti-personnel mines as a result of being so equipped."

within mixed weapons systems,[11] but this was not acceptable to other delegations. Likewise, a proposal by Australia to exempt mines whose effects could be limited exclusively to combatants [12] was not approved, in part at least because no such mines were believed to exist or to be under development. Finally, Norway's proposal to clarify the exemption, for anti-vehicle mines, "including those equipped with anti-personnel mines",[13] was not retained. The definition of anti-personnel mines in the Ottawa treaty thus covers all anti-personnel mines, including tripwire-activated directional fragmentation devices, but excludes anti-vehicle mines equipped with anti-handling devices. The ICRC will continue to monitor the development of anti -vehicle mines to ensure that they are not capable of detonation under the weight of a person.

(c) Anti-handling device

The second Austrian draft included a definition identical to that contained in Protocol n as amended.[14] At the Oslo Diplomatic Conference, following a proposal by the United Kingdom,[15] language was added to the effect that in addition to activation upon tampering with the mine, a device that detonated the mine when an attempt was made to "otherwise intentionally disturb [it]" would also be considered as an anti-handling device. A number of States invoked the so-called "doctrine of the innocent act", which holds that a mechanism so sensitive that merely touching it would cause the mine to detonate should not be considered an anti-handling device. Such a mine would therefore fall within the definition of an anti-personnel mine. If it did not, innocent passers-by would be exposed to excessive risk of injury; this would betray the very aim of the treaty , namely preventing the indiscriminate effects of anti-personnel mines. The ICRC intends to monitor developments in this field closely to ensure that both the spirit and the letter of this provision are fully observed.

(d) Transfer

The definition of transfer given in the Ottawa treaty is an exact replica of that contained in Protocol II as amended. This in turn was based on the definition of "transfer" used since 1993 for the UN Register of Conventional Arms. It was introduced into the second Austrian draft and adopted in Oslo without major changes (the word "anti-personnel" was added to the Protocol II definition). Thus, under Article 2, para. 4, of the Ottawa treaty "'[t]ransfer' involves, in addition to the physical movement of anti-personnel mines into or from national territory, the transfer of title to and control over the mines, but does not involve the transfer of territory containing emplaced anti-personnel mines." There is, however. Some disagreement as to whether the first two possibilities are cumulative or alternative. This issue has some relevance to the discussions within NATO as to the possibility of transit of United States anti-personnel mines through NATO countries.

Core prohibitions

(a) The prohibition on the use of anti-personnel mines

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[11] See APL/CW.9 of I September 1997.
[12] See APL/CW.2 of I September 1997.
[13]See APL/CW.4 of I September 1997.
[14] "Anti-handling device means a device intended to protect a mine and which is part of, linked to, attached to or placed under the mine and which activates when an attempt is made to tamper with the mine." See Protocol n as amended. Art. 2, para. 14”
[15] See APL/CW.32 of 2 September 1997

The prohibition on the use of anti-personnel mines was central to the success of the treaty and represented its primary object and purpose. Without an absolute prohibition on use, the other prohibitions could not be absolute, either. The first Austrian draft had stated that it is prohibited to use anti-personnel mines as they are deemed to be excessively injurious and to have indiscriminate effects." After some negotiate comments regarding the implication that States had in fact been violating international law by using anti-personnel mines. in the second draft the prohibition became simply an undertaking “never under any circumstances to use anti-personnel mines.., This remained the text of the provision as it was finally adopted despite the wish of a number of countries to include exceptions or transition periods. At the Brussels Conference, for example, one State called for an exception to the prohibition on use "in exceptional circumstances". In Oslo, the same State proposed a “temporary arrangement”, whereby a State “under exceptional circumstances for its national security may resort to the use of anti-personnel mines in accordance with the international laws of armed conflict.” This proposal was roundly rejected by the other participating States which felt that any such exception would undermine the entire treaty.

(b) The prohibition on the development of anti-personnel mines

The prohibition on the development of anti-personnel mines[16] represents the first time that such a provision has been included in a humanitarian law treaty. States will have to take great care in their military research and development programmes to ensure that the rule is fully respected. Special attention will have to be paid to dual-use technologies and anti-handling devices which could ca1ilse an anti-tank mine to function as an anti-personnel mine.

(c) The prohibition on "inciting" a violation

It is also prohibited to "assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Convention."[17] This provision covers, for example, the granting of licenses to manufacture anti-personnel mines. It is also relevant to the situation of some NATO countries. On ratifying the treaty, Canada entered an understanding that mere participation by Canadian soldiers in a United Nations operation involving a State not party to the Convention and the use of mines by such a State would not constitute assistance within the meaning of the treaty. This would also apply to the transit of anti-personnel mines owned by a State not party to the Convention across the territory of a State Party.

(d) Proposed exceptions to the general obligations

At the Oslo Diplomatic Conference. with the situation in Korea uppermost in its mind, the United States proposed that an exception be made to the general treaty obligations with respect to "activities in support of a United Nations command or its successor, by a State Party participating in that command, where a military armistice agreement had been concluded by a United Nations command."[18] This issue was discussed at great length, both

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[16] See Art 1, para. l(b).
[17] Art 1, para. l(c).
[18] See APL/CW.8 of 1 September 1997.

inside and outside the conference hall, but ultimately it was decided that such an exception was not acceptable. The possibility of a general transition period under which any State could defer implementation of the Convention for a set period was also considered. However, the United States did not feel that the provision as it stood was sufficient to ensure its early adherence to the treaty" and the issue was dropped.

The destruction of stockpiled anti-personnel mines

The original Austrian draft text had called for stockpiled anti-personnel mines to be destroyed within one year, though it offered the possibility of an additional one-year deferral period.[19] Following remarks by a number of States that the allotted time was unrealistically short, the second draft raised the limit to three years, but removed the possibility of deferral. At the Oslo Diplomatic Conference the limit was again raised, this time to four years, at which point final agreement was secured. The United States had suggested that an exception be made for mines not owned or possessed by a State Party though present on its territory,[20] but this proposal was rejected. Finally. Article 6. para. 5 of the Ottawa treaty specifically requires States Parties in a position to do so to provide assistance in the destruction of stockpiled anti-personnel mines. A good many States had emphasized the importance of international cooperation and assistance in fulfilling the obligation within what is, undoubtedly, a fairly short time period.

Exception for training in demining: the first Austrian draft contained a proposed exception to the prohibition on acquiring or retaining anti-personnel mines "if they are exclusively used for the development and teaching of mine detection, mine clearance, or mine destruction techniques and if the responsible institutions, the amount and the types are registered with the Depositary." A suggestion by Spain at the Brussels Conference that an exception be made to the prohibition on production in order that stocks of mines for training be replenished was not retained. At the Brussels Conference, Italy had called for a more specific limit on the number of mines needed for training in detection and clearance. This proved impossible to achieve during the negotiations in Oslo, so that the provision finally read: "[t]he amount of such mines shall not exceed the minimum number absolutely necessary", for such purposes.[21]: At the adoption of the treaty a number of States declared that they considered one to two thousand anti-personnel mines to be sufficient for training purposes.[22] This was not contested. Under Article 7 ("Transparency measures"), the types, quantities and, if possible, lot numbers of all anti-personnel mines retained for training purposes must be reported annually to the UN Secretary-General.

Clearance and distinction of emplaced anti-personnel mines

The original Austrian draft required that emplaced anti-personnel mines be destroyed within five years, with the possibility of an additional two-year period for States requesting an extension. At the subsequent Vienna Expert Meeting it was rightly pointed out that the ability of a State to remove and destroy anti-personnel mines depended on its technical capacity and resources, and that in the case of States with massive problems this process could take

[19] Art. 5, first Austrian draft treaty text.
[20] See APL/CW .10 of 1 September 1997.
[21] Art. 3, para. I. Ottawa treaty.
[22] Canada stated it would retain around 1,500, the Netherlands 2000 and Germany "thousands, not tens of thousands"... Belgium supported this interpretation.

decades. It was clear that the treaty needed to allow such States to adhere without fear that they might find themselves in breach of its provisions because of the continued presence of uncleared mines. It was even suggested that emplaced mines should be fenced and marked but that their removal and destruction should not be subject to a strict timetable.

Taking account of those concerns, the second Austrian draft differentiated between the destruction of anti-personnel mines laid within mine-fields (deemed to be a "defined area in which mines have been emplaced") and those laid in areas outside minefields. The former were to be marked in accordance with international standards and then destroyed within 10 years of the treaty's entry into force, whereas in the case of the latter the obligation was simply to destroy the mines, without a fixed deadline, and to give an immediate and effective warning to the population of the danger posed by their presence.

A number of States pointed out that a 10-year fixed period for the clearance of minefields was unrealistic. In addition, at the Brussels Conference the United Kingdom, referring to the problems of clearing "un detectable" plastic mines in the Falkland Islands. proposed that an exception be made in the case of land of marginal economic value where the ... risk to the civilian population was minimal. The ICRC, however, asked States not to extend the time period and reminded them that the recently adopted obligation in Protocol II as amended to clear mines at the end of hostilities should not be weakened. The ICRC insisted, as did a number of others, that an open-ended commitment to clear all anti-personnel mines "as soon as possible" was inadequate, as it risked detracting from some of the undoubted urgency that would be contained in a specified time-period. The shortest possible time frame was desirable from a humanitarian point of view: on the other hand, a number of countries were so cseverely contaminated by mines that too short a period would be unrealistic and might deter their adherence to the treaty.

For this reason, the ICRC proposed that the obligation to clear anti-personnel mines laid in minefields within 10 years should be maintained, but that States Parties needing more time could apply for an extension period.[23] In this way progress in mine clearance and the need for greater international assistance and support could be objectively assessed. Given the difficulty of distinguishing “minefields” from “mined areas”, at the Oslo Diplomatic Conference the obligation to demine within 10 years of the treaty's entry into force for each State was expanded to include all emplaced anti-personnel mines, though with the possibility for severely mine-affected States to be granted extension periods of up to 10 years at a time. As a result of this agreement the definition of a minefield was removed and only that of a mined area remained: this was deemed to be "an area which is dangerous due to the presence or suspected presence of mines."[24]

The final issue of importance to note is that the obligation to demine covers all territory under the jurisdiction *or* control of a State Part.[25] This means that the obligation extends to a situation where an insurgent or separatist armed force controls a certain position of territory within the boundaries of a State. Of course, when deciding whether to grant an extension

[23] *Comments of the International Committee The Red Cross on the Third Austrian Draft (13/5/97) of the Convention on the Prohibition of Anti-personnel Mines*, Informal Working Paper for the Oslo Negotiations, September 1997.A similar extension period is contained in section C (paras. 24-28) of the Verification Annex of the 1992 Chemical Weapons Convention.

[24] Art. 2, para, 5

[25] Art. 5, para. 1

period, States Parties can be expected to sympathize with a fellow State unable to clear emplaced mines because it does not have physical control of all of its territory.

International cooperation and assistance

It was evident that where both the clearance of emplaced anti-personnel mines and the destruction of stockpiled mines were concerned, international cooperation and assistance would play an essential role in ensuring early adherence to the treat:' and its successful implementation on the ground.[26] At the Vienna Expert Meeting, the ICRC pointed out that the treaty's technical demands would be entirely different from those set out in Protocol II as amended, which envisages the use of new types of mines. Therefore, the text relating to technical assistance could not be identical to that painstakingly put together in the CCW negotiations.

Assistance to mine victims

Similarly, international support would be a crucial element with regard to the need to provide long-term care and assistance for mine victims. In its formal comments on the third Austrian draft,[27] the ICRC called for the inclusion of a provision requiring each State Party in a position to do so to provide assistance for the care and rehabilitation of landmine victims and for mine-awareness programmes. A further proposal that States Parties accept a duty under Article 1 to assist mine victims was, however, not retained. The relevant provision incorporated in the final text of the treaty expressly mentioned the possibility of channelling assistance to mine victims through relevant non-governmental organizations (NGOs), the United Nations and components of the International Red Cross and Red Crescent Movement.[28] Following a proposal by the ICBL, the provision also set out an obligation to provide international assistance for the social and economic reintegration of survivors of mine explosions.[29] As ICBL representatives rightly noted during the negotiations in Oslo, comprehensive assistance to mine victims demands more than surgical care and physical rehabilitation.

Promoting compliance and implementation

As already mentioned, the issue of verification of compliance with the treaty was the subject of very detailed debate. At the Vienna Expert Meeting, differences arose between States which thought that little or no verification was necessary to oversee what was essentially a humanitarian treaty, and those which felt very strongly about the security implications of a ban and therefore pushed for comprehensive verification procedures similar to those provided for in earlier disarmament agreements. One country, Saint Lucia, speaking on behalf of the Organization of American States pointed out that countries in Central America were eager to comply with the treaty and to cooperate fully where transparency and exchange of information were concerned in order to obtain outside assistance in eliminating their anti-personnel mines this positive approach. It suggested, was preferable to attempts to “catch”, treaty violators through traditional verification mechanisms.

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[26] Art. 6
[27] *Supra*. note 23.
[28] Article 6, para. 3.
[29] *Idem*

In the same spirit, at the subsequent Bonn Expert Meeting one government proposed the creation of an implementation or fact-finding commission which would work on a cooperative basis. While no consensus on any approach emerged from the discussions, the Chairman's summary mentioned the need to ensure that any mechanism was cost-effective and practical, stressed the value of information exchange and raised the possibility of providing for fact-finding missions. The Chairman declared that a possible adoption of the approach used in arms control agreements would require further discussion and emphasized the reference to an "effective" ban in UN General Assembly resolution 51/45S.

Discussions continued in June 1997 at the Brussels Conference. During which a number of countries including Norway, Sweden and Switzerland, asserted that since this was primarily a humanitarian law treaty, detailed verification was not essential and might even dissuade adherence. Ecuador claimed that the prohibitions on production and export were needed to ensure that the treaty would be respected. Others, notably Australia, called for a disarmament treaty that would attract universal adherence, suggesting that the Ottawa treaty might be a "permanent partial solution" Uruguay called for a "balanced formula" including effective verification provisions so that the treaty did not become merely an expression of good intentions .

Several "transparency measures" had already been included in the first Austrian draft. By the time the definitive text was drawn up, the list of items to be reported had grown considerably Under Article 7 of the Ottawa treaty, each State Party must provide the Depositary with a detailed report on many compliance-related matters within 180 days of the treaty's entry into force. Provision is also made for fact-finding missions to clarify any doubts as to the compliance with the treaty by a State Party.[30] For obvious reasons, this was a difficult provision to negotiate and it is easily the longest article in the treaty. Less controversially, it was agreed that States Parties would meet annually following the treaty's entry into force up until the date of the first review conference, scheduled to take place five years after the treaty comes into force. Amendments may, however, be proposed at any time after the treaty has become legally binding. The relatively simple procedures regarding the facilitation and clarification of compliance are likely to be complemented by a "citizen-based monitoring mechanism", the details of which are to be elaborated during the course of 1998.

National implementation

Taking up a proposal made by the United States during the negotiations leading to the adoption of Protocol II as amended, the first Austrian draft text had incorporated a provision for compulsory universal jurisdiction for wilful acts committed during armed conflict and causing death or serious injury .In the second draft. However, the proposed provision had been considerably watered down. to a duty only to take "all appropriate legal, administrative and other measures including the imposition of penal sanctions, to prevent and suppress any activity prohibited to a State Party (...) undertaken by persons or on territory under its jurisdiction or control."[31] Accordingly, at the Bonn Expert Meeting the ICRC circulated an informal proposal on detailed national implementation measures. At the Oslo Diplomatic Conference, Switzerland introduced a proposal for compulsory jurisdiction over any national of a State Party who has used anti-personnel mines or ordered them to be used. Unfortunately and perhaps as a consequence of the largely disarmament background of many of the

[30] 30 See Art. 8.
[31] See Art. 10. Second Austrian Draft.

negotiators, this proposal was not retained. The provision finally adopted is largely that contained in the second Austrian draft, and therefore normally -though not always -requires the adoption of national legislation.

Reservations

An article prohibiting reservations to the provisions of the treaty, similar to the one found in the 1992 Chemical Weapons Convention, was already included in the first Austrian draft- It remained unchanged throughout the period of negotiations, although at the Oslo Diplomatic Conference several States tried to weaken it by inserting an exception for periods of armed conflict or to have it deleted altogether.[32]

Entry into force

The first Austrian draft had proposed that the treaty should enter into force six months after the deposit of the fortieth instrument of ratification.

Some States felt that the number was too high: the ICRC, for its part, reminded the participants at the Oslo Diplomatic Conference that the 1949 -Geneva Conventions and their 1977 Additional Protocols had entered into force after the deposit of just two ratifications. Indeed, from a humanitarian viewpoint the application of the new treaty even by a limited number of States would provide significant benefits and encourage others to follow. However, some other States felt that the security implications of forgoing anti-personnel mines were significant and that even more than 40 ratifications should be required.

Ultimately, a compromise agreement was reached, stipulating that 40 ratifications would be needed for the treaty to come into force.[33] As at the time of writing, 11 States -Belize. Canada, the Holy See, Hungary, Ireland, Mauritius, Niue, San Marino, Switzerland, Trinidad and Tobago and Turkmenistan -had deposited their instruments of ratification with the Depositary the “UN Secretary-General”. It is hoped that the number of 40 ratifications may be reached well before the end of 1998, so that the treaty could come into force in early 1999.

Following a suggestion by Belgium, an opportunity was given to the first 40 States to declare, at the time of ratification, that they would provisionally apply the treaty’s core provisions, set out in Article 1, para.l (i.e., the prohibitions on use, development. production and transfer) until the entry into force of the treaty as a whole.[34] As at the time of writing, two States -Mauritius and Switzerland had taken advantage of this possibility.

Withdrawal

The first Austrian draft text had provided for withdrawal from the treaty on 90 days’ notice if a State decided that “extraordinary event [had] (...) jeopardized [its] supreme interests,” At the Vienna Expert Meeting a number of different approaches to this question were already emerging, Some States were of the opinion that no right of withdrawal should be permitted in view of the danger that it might be used when a country was engaged in an armed conflict. which was precisely when compliance with the treaty's provisions was most important.

[32] Art. 19.
[33] Art, 17
[34] 34 Art. 18.

Mexico made a proposal along the lines of the withdrawal clause contained in 1977 Additional Protocol I whereby withdrawal was possible but could not be effective during an ongoing armed conflict.[35] Other States proposed a straightforward withdrawal clause similar to that contained in the Austrian draft text. At the Oslo Diplomatic Conference there was extensive negotiation on this issue. Finally, agreement was reached on a provision that allows effective withdrawal six months after receipt of the relevant instrument by the Depositary. If however, at the end of that six-month period, the withdrawing State Party is engaged in an armed conflict, the withdrawal will not take effect before the end of the armed conflict.[36]

The implications of the Ottawa process for international humanitarian law

The success of the Ottawa process marks a welcome return to the traditional approach to the development of international humanitarian law whereby treaties are adopted without a consensus rule. Indeed. Recent negotiations in the domain of international humanitarian law, such as those on the 1980 CCW, were governed by the practice of consensus. The formal CCW review process demonstrated the limitations of this method where landmines were concerned. With this in mind, it may well be necessary to review the practice of adopting agreements by consensus for future CCW negotiations (a Second Review Conference is scheduled for 2001).

In addition, the continuing importance of the CCW should be stressed. It is the only framework based on international humanitarian law for the specific regulation of existing conventional weapons and for responding to the emergence of new weapons. The regulation of the employment of anti-personnel mines by Protocol II as amended should be seen as the absolute minimum norm for States which continue to use them. Protocol II as amended also remains the only international instrument specifically governing the use and transfer of anti-vehicle mines and establishes the rule that those who use mines of whatever type are responsible for their removal at the end of hostilities. This could prove to be an important protection, even for Parties to the Ottawa treaty, in situations of conflict with a State not party to it. .

For the ICRC, and indeed for the International Red Cross and Red Crescent Movement as a whole, the mines campaign has provided an example of how successful advocacy in the interests of war victims can be carried out in the post -Cold War environment. Dozens of National Red -Cross and Red Crescent Societies, including many new to campaigning, have felt empowered to advocate on behalf of mine casualties present and future. The campaign has been conducted without compromising the fundamental principle of neutrality, which prohibits components of the Movement from taking sides in a conflict or favouring particular political parties or groups. This principle is intended to ensure that all victims of war receive protection and assistance -it is therefore a means to an end, not an end in itself.

The Ottawa process has also shown that civil society has a crucial role to play in strengthening international law. The complementary role played by key governments, the ICBL and the ICRC augurs well for the future development of international humanitarian law. In contrast to the ICRC, the ICBL has been able to criticize the positions of specific governments directly and publicly. On the other hand, the ICRC's special status as an

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[35] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I). Article 99.

[36] Art. 20.

international organization and its network of professional military officers working with armed forces on humanitarian law issues give it access to governmental and military circles, which NGOs often do not have.

The global mobilization that has been necessary to achieve an international legal norm prohibiting anti-personnel mines has also clearly shown that the international community must seek a more preventive approach to the control or prohibition of weapons which go against international humanitarian law, and a more dynamic method of developing that law. The Ottawa process has raised awareness among the general public of the limits that must be placed on the conduct of warfare. As a result, higher expectations will be placed on the behaviour of States. At present the ICRC is examining, together with medical experts, possible objective medical criteria to determine whether the effects on health of a given weapon are of a nature to cause superfluous injury or unnecessary suffering.[37]

Despite its success, the Ottawa process has most clearly demonstrated the need for a more preventive approach to arms issues under international humanitarian law. One must ask whether appalling levels of civilian death and injury have to be reached before the use of each new weapon which may violate international humanitarian law is either regulated or prohibited, as the case may be. Far more systematic analysis and informed debate is needed before any new weapon is deployed. The recent agreement to prohibit, in advance, the use and transfer of blinding laser weapons is a basis for hope.[38] Given the rapid development of new technologies, the protection provided by humanitarian law will be of crucial importance in making sure that humankind is the beneficiary, and not the victim, of technical advances which have profound implications on the waging of war.

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[37] See Coupland. R. M. (ed.). The SlrUS Project Towards a determination of which weapons cause “superfluous injury or unnecessary suffering”. ICRC, Geneva, 1997

[38] Louise Doswald-Beck, "New Protocol on Blinding Laser Weapons", *IRRC*, No.312, May-June 1996, pp. 272-299.

Towards Total Prohibition of Anti-Personnel Landmines: From Geneva to Ottawa

A. Jayagovind*

Contents

Introduction

Humanizing warfare is not exactly a contradiction in terms; and the law relating to armed conflicts does demonstrate that when arms clash, the law has not been a silent spectator. Whereas building a world order, free from the scourge of war, still remains a distant dream, certain definitive steps have been taken time and again to make armed conflicts less destructive. However, to the misfortune of mankind, technological advancement has continued to add more and more novel and complicated weapons to the destructive armouries and the legal response, as usual, has always been tardy. As a result, people often fail to appreciate the contributions of international humanitarian law.

Confining the warfare to actual combatants so as to exclude civilians from the direct effects thereof and to control the use of weapons inflicting superfluous injuries causing unnecessary suffering are two major tenets of the law relating to armed conflicts. However, all pervasive use of mines, booby-traps and other similar devices for quite sometime have posed formidable challenge to these well-established principles. The focus of this paper is essentially on a major species of mines, i.e. anti-personnel landmines (APLs), which have been inflicting untold pain and suffering upon innocent people allover the world. Appropriately enough, the International Committee of the Red Cross along with other humanitarian organizations has been in the forefront of the movement against this most inhuman of human inventions; and the credit should go to these institutions for whatever progress that has been achieved in this area.

Landmines, which were originally conceived to counter attacks by tanks and other armoured vehicles, have in the course of time given birth to APLs. The havoc, wrought by APLs have been extensively documented. They claim nearly 2000 victims a month even now and over the last fifty years, they have inflicted more death and injury than nuclear and chemical weapons combined. It is estimated that there are 84 million uncleared landmines in 64 countries; and it would take 1100 years and $33 billion to clear them at current rates

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(assuming that no new mines are emplaced hereafter). Angols, Afghanistan and Cambodia are the worst affected States, closely followed by erstwhile Yugoslavia, Mozambique, Rwanda, Iraq, Somalia and Sudan. Each year, two to five million landmines are emplaced in the ground, causing most lethal and long-lasting pollution. It may be noted that apart from usual human casualties, vast stretches of mine-infested areas will be out of bounds for any human use, till they are completely cleared.[1]

Landmines are the low-cost option available to military forces mainly for defensive propose, i.e. to halt the advancement of the enemy. So used, landmines have not caused much of a problem especially when conflicts were of short duration, as in the case of Indo-Pak wars 1947, 1965 and 1971. But when prolonged wars were fought as in the case of World War II and Iran-Iraq War, there were indiscriminate uses of landmines, even when the parties to conflicts were well-trained regular armies. The problem became worse and APLs emerged as distinct weapons, when irregular guerrilla forces became major actors in the global arena. Neither they, nor regular forces while being confronted by them, played by the rules of the game. Bosnia-Herzegovina, Angola, Afghanistan, Rwanda, Cambodia etc., are the pathetic victims of abuse of landmines and bear testimony to this fact.[2]

Legal Response

The Geneva Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons, 1980 along with two Protocols was the first definitive step against the use of landmines. Protocol II of the treaty, entitled "Protocol on Prohibitions or Restrictions on the Use of Mines, Booby- Traps and other Devices" provided:

1. mines must be directed only against military objects and all feasible precautions must be taken to protect civilians;
2. remotely-delivered mines must not be used unless their location is accurately recorded or each one was fitted with effective self -neutralizing mechanism;
3. records must be kept of minefields laid before or during the conflict;
4. at the end of hostilities, all concerned parties must try to agree among themselves with regard to necessary measures to clear minefields.

By the end of 1995, only 57 States had adhered to the 1980 Convention and this weak response, rather paradoxically, was attributed to the weakness of the provisions of Protocol II. In fact, the Convention and the Protocols have become out of date the moment they were signed, since they did not contain any provision relating to internal armed conflicts wherein the abuse of APLs were rampant. Further, the Protocol did not categorically prohibit plastic-cased, non-detectable mines which came into vogue in the eighties. Its provisions relating to remotely- delivered mines and hand-emplaced mines were considered too weak.

A Protocol, amending Protocol II, was adopted in 1996 again in Geneva and it is awaiting ratification. While this amended Protocol is the most comprehensive Convention on landmines including APLs, it still fell short of total ban on APLs. For example, APLs that self-destruct or self-deactivate after 120 days, including those scattered by aircraft or artillery are permitted under the amended Protocol. APLs could still be used under the Protocol in

[1] Publicly available information reveals the systematic use of landmines since 1940, The International Committee of the Red Cross, *Anti-Personnel Landmines: Friend or Foe*? (Geneva, 1996), p. 26.
[2] *Id*., pp. 29-37.

marked, fenced and monitored fields for military purposes. Though it is uncharitable to characterize some of these interstices between the Articles of the Protocol as permissions, the fact of the matter is that they could be exploited to the hilt. It is not that the people who abuse APLs require such permission, for they would not become parties to the Convention. The fractured Convention only indicated the confused response of the international community torn between idealism and real politic. However, to push forth idealistic agenda, a group of fifty like-minded States came together in Ottawa in 1996 and proposed an ambitious agenda for the total abolition of APLs. Following this Ottawa initiative, a Conference was convened in Brussels in June 1997. The draft Austrian text on the total prohibition of APLs provided the basis for deliberations at this Conference. The issue was further discussed at the Oslo Conference in September, 1997 and a Convention on the Prohibition of the Use, Production, Stockpiling and Transfer of Anti-Personnel Landmines and their Destruction was agreed at this Conference on 18th September 1997. This Oslo Convention was discussed at the Ottawa Conference held in December, 1997.

The Oslo Convention is the nearest towards total ban on APLs. This Convention should however be treated as an extension of the amended Protocol II and the Convention admits as much when in its preamble, it urges all States to accept and ratify the amended Protocol. The present analysis is based upon the Oslo Convention against the backdrop of the amended Protocol II.

Application of the Convention

The Geneva Convention on Conventional Weapons was applicable in situations referred to in Article 2 of the Geneva Conventions of 1949, i.e. to international armed conflicts and also to wars in the exercise of the right of self-determination (provided they fulfill certain minimum requirements such as unified command etc.). But the worst abuse of APLs are round in internal armed conflicts as in the case of Afghanistan, Cambodia etc. Article 1(3) of the amended Protocol extends the scope of the Convention to "armed conflicts not of an international character occurring in the territory of High Contracting Parties". Each Party to such internal conflict "shall be bound to apply prohibitions and restrictions of the Protocol". Article 14 of the Protocol obligates the High Contracting Parties to take appropriate steps including legislative and other measures to prevent and suppress violations of this Protocol by persons or on territory under its jurisdiction and control. This would include appropriate penal sanctions against the violators of the Convention.

The hard reality, however, is that no State in the real sense exists in places wherein APLs have been wreaking havoc. Who was to become a Party to the Convention and enact legislation in places like Bosnia, Afghanistan, Somalia and even in Cambodia? The enforcement provisions, namely, "facilitation and clarification of compliance", found in the Oslo Convention do not have relevance to these situations in view of the absence of centrally-responsible authority, and in such situations, whether the erstwhile States, if any, was a party to the Convention is irrelevant. In brief, in the absence of effective international peace-making and peace-building authority, what we are doing only amounts to tinkering with the problem. The suggestions, made by the erstwhile Secretary-General of the UN, Boutros Boutros-Ghali, in this connection, have not yet been acted upon.[3]

[3] Boutros Boutros-Ghali, *An Agenda for Peace* (Report of the Secretary-General pursuant to the statement adopted by the summit meeting of the Security Council in 1992).

In so far as the Convention imposes an absolute obligation not to transfer APLs to anyone directly or indirectly, it may have a salutary impact upon the situation. In Western countries, the arms are generally manufactured in the private sector and the latter's activities are required to be tightly controlled . Article 9 of the Oslo Convention required States Parties to suppress any activity, prohibited to a State Party, by any person in its territory. Probably, the obligation under Article 1 (c) "not to assist, encourage or induce anyone to engage in any activity prohibited to a State Party under this Convention" applies to extra-territorial activities meddling in the affairs of other States.

The UN is still grappling with the issue of bringing warlords, engaged in crimes against humanity under anarchic conditions to trial before international tribunals. It is appropriate to treat the violation of this Convention by anyone, whatever may be his status, as a crime against humanity; and in the present context, wherein the Convention has not yet been widely accepted for various reasons, the consensus may still be possible so that transfer of APLs to irregular forces and the use of APLs without adequate safeguards to protect civilians may be considered as crimes against humanity. Such a step may go a long way in cutting off transnational support to abusers of APLs.

Defining Anti- Personnel Mines

The Geneva Convention of 1980 did not contain a specific definition of APLs. The expression was defined for the first time in the amended Protocol II of 1996. Article 2(3) of the Protocol defines APL as:

> mines primarily designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons.

The expression "primarily designed" was used to distinguish APLs from anti-tank mines equipped with anti-handling devices. The us was worried that equipping anti-tank mines with anti-handling devices might bring them within the definition of APLs.[4] But if that is the case, it would be better to make that point explicit rather than using an ambiguous expression "primarily designed" which will weaken the definition. The Oslo Convention clearly separates APLs from anti-tank mines. It defines APL as:

> a mine designed to be exploded by the presence, proximity or contact of a person and that will incapacitate, injure or kill one or more persons. Mines, designed to be detonated by the presence, proximity or contact of a vehicle as opposed to a person, that are equipped with anti-handling devices, are not considered anti-personnel mines as a result of being so equipped.

Prohibition of Anti-Personnel Mines

The Oslo Convention categorically prohibits all APLs, quite unlike the amended Protocol which bristles with several ambiguous qualifications. Under the Convention, APLs cannot be used even by military forces in regular warfare; for, Article 1 prohibits the use of APLs under any circumstances .

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[4] Mariam Wash, "Contemporary Practice of the U.S.A. relating to International Law" *American Journal of International Law* (Washington D.C.) Vol. 97, 1997, pp. 332-333

Under Article 4, the Contracting States are required to destroy all APLs stockpiled in their territories either by military establishments or by private people within a period of four years after the adoption of the Convention by the concerned State. As for the APLs emplaced in its territory, a State has a ten year period to ensure their destruction. But the obligation to fence mined-areas so as to exclude civilians is immediate. The fencing of mined-areas should at least be to the standards set out in the technical annex to Protocol II of 1996. If a State cannot destroy all APLs within ten years, it can seek an extension for a maximum period of another ten years. But such a request has to be submitted to a meeting of the Contracting States along with sufficient justification, highlighting its inability to comply with the requirements. The request may be approved by the majority of the States present and voting.

As was already pointed out, mine-clearance is a tough job. When mines are used by armies in regular warfare as in the case of lndo-Pakistan war, the respective armies normally ensure mine clearance. However, when they are used by or against irregular forces, landmines wreak havoc. Even when normalcy returns to some of these places, mine clearance would be an Herculean task to the fledgling governments in those places. First of all, it would be unlikely that there would be any maps and other records concerning mined-areas. Secondly, even when the information is available, mine clearance may prove to be too expensive and a difficult task for them.[5] A just and equitable solution that all those States who fished in troubled waters earlier in those places and who were primary suppliers of mines to warring factions therein must at least bear a significant part of the burden of mine-clearance. The principle well-established in Environmental Law that the polluter must pay must be extended to this area as well. Article 6 of the Oslo Convention providing for international cooperation in the task of mine-clearance is too general in this regard.

It is unrealistic to expect any State to own up its responsibility and make amends. Nevertheless, the fact that most of the mine-affected areas are cold war legacies cannot be overlooked and the major players in this cold war game including the suppliers of mines must bear some kind of collective responsibility for mine clearance at least for the sake of humanity. Otherwise, there will not be any significant headway in the area of mine clearance.

Discharging Obligations under the Convention

The Oslo Convention elaborately deals with implementation measures. Under Article 7, every State Party is expected to report to the Secretary-General of the UN within 180 days from the date of entry into force of the Convention for that member:

a. national implementation measures;
b. the total of all stockpiled APLs, owned or possessed by it or under its jurisdiction or control;
c. to the extent possible, all relevant details concerning mined areas;
d. the measures taken for the clearance of mined areas;
e. the measures taken to protect the population from the harmful effects of mines.

[5] Waila a modern landmine can be purchased for $10, clearing each will cost 50 times the amount. According to the U.N. estimate, 60 million sq. meters of land await high priority clearance. In Afghanistan, probably the worst affected by landmines. it will take 4000 years to rid a fifth of Afghanistan's mined territory at the rate in which they are being cleaned by manual methods. *The Hindu*. (ed.), 17-12-1997.

The Parties are supposed to intimate the Secretary-General annually the progress regarding the implementation of the Convention. All these information will be shared with all other States Parties through the Secretary-General.

Article 8, titled "Facilitation and Clarification of Compliance" contains a well laid-out international scheme to ensure compliance. Any State which has doubts about compliance by another State may seek clarification from the latter through the Secretary-General. The latter is under an obligation to answer the charge within 28 days. If the clarification is not satisfactory , the matter may be raised in the general body meeting of the Parties to the Convention. The meeting will discuss the problem and try to arrive at a solution by consensus. If no consensus is forth coming, the decision will be taken by a majority of States present and voting. The decision may be to establish a fact-finding mission to investigate the matter by actually going to the territory of the State alleged to have breached the Convention. While the mandate of this mission will be decided by a majority of States, its composition will be decided by the Secretary-General in consultation with the State charged with the breach. For this purpose, the Secretary-General will keep a roster of experts nominated by States Parties. Any expert, included in this list, shall be regarded as the nominee of all States Parties, unless a particular State objects to his inclusion in the roster. The Secretary-General shall ensure that in all such cases, all such experts shall not participate in fact-finding missions in objecting States. A scheme like this will definitely avoid the show-down which we have witnessed recently in Iraq vis-a-vis the U .S.A.

A minimum of nine experts may be appointed in a particular fact-finding mission. This mission has the right of entry into the territory of the concerned State upon at least 72 hours notice. The latter is under an obligation to ensure their safety and to cooperate with them fully in their investigations. They shall have access to all areas and installations where facts relevant to compliance could be collected. However, the host State may restrict their access to particular areas:

a. for the protection of sensitive~ equipment, information and areas;
b. for the protection of constitutional obligations which the State may have with regard to proprietary rights, searches and seizures; or
c. for the physical protection and safety of members of the mission.

All these grounds on which the access may be restricted are capable of defeating the scheme of investigation. The Convention, however, helpfully adds that in all such cases, the host State shall make every reasonable effort to demonstrate through alternative means its compliance with the Convention.

The mission will submit its report to the Conference of Contracting Parties. The Parties will try their best to reach an acceptable decision by consensus; but if this effort fails, the necessary decision may be taken by two-thirds majority present and voting

Notwithstanding some of the infirmities which may be detected by the close reading of the scheme, this is probably the best possible scheme, given the reality of international relations. But again the main problem is that the scheme is irrelevant to the most mine-infested areas, where there are no governments.

Disarmament v. Humanitarianism

Many States like the U.S.A., China and India have problems in accepting the Convention, notwithstanding that they are. in agreement with the Objectives of the Convention. For example, India is unlikely to sign the Convention, so long as it has problems with its neighbours and for the U.S.A., the main worry would be the security of its troops in Korea. Article 20, dealing with the withdrawal from the Convention, provides that State may withdraw by giving six month's notice, but if the withdrawing State is engaged in armed conflict during this period of six months, the withdrawal shall not take effect before the end of the armed conflict. In other words, a State Party to the Convention will not be able to use APLs in regular warfares even when it has been attacked, unless it has foreseen the conflict and withdrawn fairly early before the outbreak of the conflict.

Misgivings have been voiced that essentially disarmament measures (like Article 20) have been surreptitiously pushed forth under the guise of humanitarian measures. It is in this context that the countries like India have called for phased acceptance of the Convention. As per this approach, States would first strictly control the manufacturing and stockpiling of APLs and would ensure that their use shall be confined to their own military purposes. Under no circumstances would they allow APLs to move out of their territories or fall into unauthorized hands. Total ban on APLs may not be a feasible proposition for the countries facing external threat, since APLs still seem to be a relatively cheaper defence mechanism compared to others. This hard reality does not diminish the value of Ottawa Process to ban APLs altogether. Just as chemical and biological weapons are sought to be banned, there is a strong case for the banning of APLs as well. If the global opinion can force the countries to give up the use of APLs altogether, so much the better for world community. But until that time, countries like India are entitled to insist upon the strategy of phased acceptance of the obligations under the Convention.

Conclusions

Hopefully, the Oslo Convention along with the amended Protocol II will become binding legal obligations at the earliest; and this will go a long way in humanizing the warfare. Nevertheless, the problem will still remain, unless an effective peace-building mechanism is established under the auspices of the UN Pending such a mechanism, an absolute ban on the supply of APLs to the troubled spots may reduce the human suffering to a significant extent.

Mine-clearance seems to be one of the tough problems that we are facing at present. The mine-infested areas are simply not in a position to clear them without substantial help from international community. A radical solution in this regard is to demand the major players of the cold war game of yester years to shoulder the responsibility for the mess they have created on the basis of "let polluter pay" principle. If this is not possible given the reality of international relations, something more substantial than vague international cooperation (as provided in the Convention) is necessary.

Total ban on APLs is too difficult a goal for countries like India faced with external threat. In such a context, a phased acceptance calling for step by step approach taking into account the realities of the given situation should be encouraged. For example, the countries like India must declare that they shall never permit the use of APLs except in regular military operations by their own forces. All countries must undertake that APLs shall never fall into the hands of irregular militia. This is perfectly consistent with the basic objectives of the Ottawa Process.

Some of the apparently critical references made in this paper are not in any way intended to belittle the significance of the Ottawa Process. It is possible that the world public opinion may force the governments to give up the use of APLs as well, treating them on par with chemical and bacteriological weapons; and the Ottawa Process has made a beginning in this regard. The Oslo Convention is probably the best that could be achieved under the given circumstances; but the realistic appraisal of what has been achieved is equally necessary for the meaningful progress in the years to come.

A new step forward in International law:

PROHIBITIONS OR RESTRICTIONS ON THE USE OF CERTAIN CONVENTIONAL WEAPONS

by Yves Sandoz

Contents

I. INTRODUCTION

On 10 October 1980, the "United Nations Conference on Prohibitions or Restrictions of Use of Certain Conventional Weapons Which May be Deemed to be Excessively Injurious or to have Indiscriminate Effects" ended with the adoption by consensus of the following instruments:

1. Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons,
2. Protocol on Non-Detectable Fragments (Protocol I),
3. Protocol on Prohibitions or Restrictions on the Use of Mines, Booby Traps and Other Devices (Protocol II),
4. Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III).

In addition, at its first session, the Conference had adopted a Resolution on small-calibre weapon systems. All these texts are reproduced in this issue of the *Review*. It should also be pointed out that the Conference took note of six draft resolutions and one proposition which it will submit in its report to the UN General Assembly.

We propose here to give an account of the stages which led up to the successful outcome of the Conference; to indicate the place of the Convention and the three Protocols in international law; to analyse briefly the contents of the instruments and the Resolution adopted by the Conference, and of the different motions and propositions; and finally, to attempt to assess the influence of this accord in humanitarian terms.

II. BACKGROUND

The Second World War clearly showed the necessity of ensuring better protection for the civilian population during armed conflicts. The Fourth Geneva Convention of 1949 represents a great advance in this respect, but is essentially concerned with the population in the hands of an enemy Power. The general protection of civilians against the effects of hostilities is still inadequately covered by this Convention. The ICRC soon realized this, and as early as September 1956 it drew up a set of "Draft Rules for the Limitation of the Dangers Incurred by the Civilian Population in Time of War" .These rules included a chapter on weapons, entitled "Weapons with Uncontrollable Effects", proposing, in particular, that weapons whose harmful effects might escape the control of those using them and delayed-action weapons should be banned, and that belligerent parties making use of mines should be obliged to chart minefields and, at the cessation of active hostilities, to hand over the charts to the authorities responsible for the safety of the population. This proposal was presented in 1957 to the Nineteenth International Red Cross Conference which requested the ICRC to submit it to governments.

This move towards a further development of international humanitarian law was premature, however, since many States were still not parties to the Geneva Conventions.

The matter was taken up again in 1965, at the Twentieth International Red Cross Conference which in its Resolution XXVIII pointed out that "indiscriminate war constitutes a danger to the civilian population and the future of civilization " and that "the right of parties to a conflict to adopt means of injuring the enemy is not unlimited", The International Conference on Human Rights, held in Teheran in 1968, voiced similar anxieties, and the United Nations General Assembly, in Resolution 2444, adopted the principles which these Conferences established on the subject.

In the report on the reaffirmation and development of the laws and customs applicable in armed conflicts presented to the Twenty-first International Red Cross Conference in 1969, the ICRC set forth as its principal conclusions that the belligerents should abstain from using weapons:

1. likely to cause unnecessary suffering;
2. which, because of their lack of precision or their effects, affect civilians and combatants without distinction ;
3. whose harmful effects were beyond the control, in time or space, of those employing them.

The Conference requested the ICRC to continue its efforts in this field.

In the same period, studies on the subject were published by the UN Secretariat and again by the Stockholm International Peace Research Institute.

In 1971 and 1972, the ICRC organized a Conference of Government Experts on the Reaffirmation and Development of International Humanitarian Law applicable in Armed Conflicts.

The documentation presented to the Conference dealt with protection of the civilian population in time of armed conflicts and, in particular, with protection against certain types of bombing and against the effects of certain weapons. While not inviting the experts to discuss "prohibitions of specific weapons", so as not to overlap the work of bodies concerned with disarmament, the ICRC thought it possible for them to examine, in addition to general principles, the principles relating to weapons which in any case, owing to their effects or their lack of precision, might affect the civilian population indiscriminately. The experts' opinions fell into three categories. According to the first, the problem of weapons ought not to be dealt with by such a body. The second felt that, without dealing directly with the question of weapons of mass destruction (nuclear, biological, chemical), the necessity of banning them should be affirmed, since greater protection for the civilian population largely depended on such a ban. The third current of opinion held that the Conference should not consider weapons of mass destruction-under discussion by the Conference of the Disarmament Committee-but other particularly cruel weapons which were not being studied anywhere else.

This third tendency won the day, and at the second session of the Conference, in 1972, the experts of nineteen States asked the ICRC to organize a special meeting to consult legal, military and medical experts on the question of the explicit prohibition or restriction of conventional weapons likely to cause unnecessary suffering or to have indiscriminate effects. This consultation took place in Geneva in 1973. A purely documentary report was produced, without formulating any specific; proposals. Its role was to stimulate further studies on the subject, and it was distributed to all National Red Cross Societies, all the governments of States parties to the Geneva Conventions and all the relevant: non-governmental organizations.

The draft of the Protocols additional to the Geneva Conventions, as presented to the Diplomatic Conference which met in Geneva in 1974, contained general principles applying to weapons but no provisions on the use of any specific weapon. The Conference nevertheless set up an *ad hoc* Committee to deal with the problem. Again, the prevailing view was that the Committee's work should be restricted to conventional weapons.[1] With the encouragement of the Diplomatic Conference, the ICRC organized a Conference of Government Experts, which held two sessions, one at Lucerne in September-October 1974, the other in Lugano in January-February 1976.

Like the *ad hoc* Committee of the Diplomatic Conference, the experts discussed various conventional weapons; but in the end no article on the subject of a specific weapon was included in the Protocols. An article envisaging the creation of a committee on the prohibit:ion or restriction of certain conventional weapons, whose task would have been to examine definite proposals on the matter and to prepare agreements, was dropped as it failed, by a few votes, to obtain the required two-thirds majority.

However, a resolution was adopted by the Diplomatic Conference (Resolution 22) recommending, *inter alia*, "that a Conference of Governments should be convened not later than 1979 with a view to reaching agreements on prohibitions or restrictions on the use of specific conventional weapons" and "agreement on a mechanism for the review of any such agreements and for the consideration of proposals for further such agreements".

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[1] This expression covers all weapons not included in the category of "nuclear , biological or chemical" weapons.

The UN General Assembly supported this recommendation (see Res. 31/52 of 19 Dec. 1977, 33/70 of 28 Sept. 1978 and 34/82 of II Dec. 1979), and the proposed Conference, the subject of the present :article, after a preparatory Conference which met in August-September 1978 and March-April 1979, took place in Geneva from 10 to 28 Sepltember 1979 and from 15 September to 10 October 1980.

III. CONTEXT

The specific prohibition of certain weapons belongs to two branches of international law, disarmament law and international humanitarian law applicable in armed conflicts. This dual relationship is not unimportant, since each of these laws approaches problems differently.

In matters of disarmament, stress is laid on problems of security. The aim is to proceed steadily toward general and total disarmament, without any sudden disruption in the balance of forces at some stage in the proceedings jeopardizing the security of the various States. Moreover, agreements on disarmament should cover not only prohibitions or restrictions on the use of any weapon, but also on its manufacture, storage and sale or purchase. In short, it should deal not merely with the use of a weapon but with its possession.

Problems of security are not entirely disregarded by international humanitarian law, but in that context they do not have the vital interest which they possess in relation to disarmament. The aim of international humanitarian law is, in fact, a modest one: "humanize" as far as possible those armed conflicts which cannot be avoided. Since it is by its nature subsidiary, operating only when the law prohibiting the use: of force has failed to fulfil its role, international humanitarian law cannot claim to be a substitute for the other. It would be unrealistic to think that conflicts could be prevented by laying down such severe limits on means of combat that conflict would be made impossible. There is no reason whatever why such an obstacle should prove any stronger than that formed by the law prohibiting the use of force.

It is therefore imperative for international humanitarian law to confine itself to modest objectives. True, it has had its failures; but there have also been undeniable successes, and these have been due essentially to the fact that its provisions are of humanitarian interest to everybody while harming the military interests of nobody.

The considerations outlined above also apply in connection 'with weapons. It is highly unlikely that States will accept, as part of international humanitarian law, the prohibition of weapons of strategic importance which bedevil all discussions on disarmament. On the other hand, there are some weapons the possession of which does not materially affect the balance of forces in the world, and which are not essential from the military viewpoint, but whose effects are particularly cruel or cause extensive damage without military justification. Hence some people have remarked, understandably, that international humanitarian law should be satisfied with prohibiting useless weapons. Yet in the long run this is not as ironic as it seems. Obviously, if the only effect of international humanitarian law on armed conflicts were to prevent any use of force not strictly justified by military necessity, it would still save a great many lives and much suffering. However, the urgent need to improve the protection of the civilian population led the States, in the 1977 Protocols, to go further and agree to take humanitarian factors into-account even at the sacrifice of some military advantage. The same could be said of the Conference on conventional weapons. But it should never be forgotten that it is not in the interests of international humanitarian law to venture too far in this direction. To force the pace might well lead to catastrophe.

Yet such considerations should not be understood as a suggestion to give up all efforts in this sphere. Nor should it be thought, as is sometimes the case, that military necessity is used as a pretext to reject any new humanitarian measure.

IV. CONTENT

As the Convention and its three Protocols are appended to this article, we will not go into their contents in detail.

A few items, however, seem to be worthy of close study.

I. The Convention

The scope of the Convention was established by reference to the Geneva Conventions and to Protocol I additional to them. This means international conflicts, with the understanding that it includes "armed conflicts in which peoples are fighting against colonial domination and alien occupation and against racist regimes in the exercise of their right of self-determination".

The date on which the Convention comes into force will be six months after the date of receipt of the twentieth instrument of ratification, acceptance, approval or accession. It will be noted that there is a disparity between these instruments and the Geneva Conventions; and their Additional Protocols, for which only two instruments of ratification or accession are sufficient. This disparity is explained by the fact that some States placed the debate in the sphere of disarmament. Any agreement in this sphere aimed at reducing the level of armaments and thus diminishing the military power of States can obviously be envisaged only if it is applied by all States or, at the least, by all the military Powers.

Observance of the Conventions belonging to international humanitarian law, on the other hand, should have no effect on the military efficiency of the States involved. But even if these instruments on conventional weapons are applicable only between parties to a conflict which have accepted them, it may be assumed that States which decide to ratify or accede to these instruments will forgo possession of the weapons they prohibit. These, while not of vital importance from the strategic viewpoint, still have implications for security, according to some States, who consequently demanded substantial support for the Convention and the Protocols before their entry into force. The figure of twenty is therefore a compromise between the States which held this view and those which unreservedly associated these instruments with international humanitarian law.

Another point to be noted is that a State cannot become party to the Convention alone; this is logical, since the Convention merely provides the legal framework within which the prohibitions contained in the Protocols are applicable. But the conditions fixed go further: a State becoming a party to the Convention must accept at least *two* of the Protocols. This requirement was aimed mainly at preventing any State from becoming a party only to Protocol I, which is at present of little practical significance (see below).

An interesting aspect is the system of relationships established when the Convention takes effect; the same flexible system as for the Geneva Conventions. A State which is party to the Convention is obliged not only to observe it with respect to another State also party to the Convention and having an ally not bound by it-in contrast to the rigid system adopted at The Hague Conferences of 1899 and 1907-but must also apply the Convention to the ally if the latter accepts and applies the Convention (and the relevant Protocol or Protocols) and notifies the depositary State of this fact. It will be noted, however, that the formality of notifying the depositary is not required in the Geneva Conventions.

Concerning wars of liberation (in the sense of Art. I, para. 4, of Protocol I of 1977), the authority representing a liberation movement may undertake to apply this new Convention and the associated Protocols with respect to a State which is party to these instruments and likewise bound by the 1977 Protocol I. The Convention and its Protocol or Protocols then become applicable between that State and the liberation movement, as does the 1977 Protocol I.

But the real innovation lies in the fact that the authority representing a liberation movement may act in the same way toward a State party to the present Convention and two or more of its Protocols, even if the movement is not bound by the 1977 Protocol I. Moreover, such commitment will result in the application, not only of the present Convention and its Protocols, but also of the Geneva Conventions as a whole. This means that the present Convention provides access to the whole body of the Geneva Conventions, something which was not envisaged by the Conventions.

The provision making this access possible calls for four comments.

1. It demonstrates clearly that recognition of the international character of wars of liberation, in the sense of Article 1, paragraph 4, of Protocol I of 1977, is not linked in international humanitarian law to this Protocol alone. The international character of such wars, already affirmed by numerous Resolutions of the UN General Assembly,[2] here obtains additional confirmation and, above all, direct involvement in the applicability of the Geneva Conventions.
2. Logically, the hypothesis presented by this provision should not occur. It would seem inconsistent for a State to agree to the present Convention without also accepting the 1977 Protocol I, which reaffirms or develops the principles applied in this Convention and its Protocols. But the possibility cannot be excluded, since refusal to accede to the 1977 Protocol I might be due to provisions unrelated to the question of weapons.
3. While this new step may be seen as encouraging the wider application of international humanitarian law in wars of liberation, it should be emphasized that the principle of

[2] In particular, Resolutions 2105 (XX), 2621 (XXV) and 3103 (XXVIII).

equality of rights and obligations of the parties to a conflict-a vital element in international humanitarian law-has not been disputed: in fact it has been clearly reaffirmed.

4. The unlikely hypothesis of a State's becoming a party to the Convention without being a party to the Geneva Conventions was not even envisaged. This demonstrates the recognized universal character of those Conventions and should encourage the few States not yet officially bound by them to accede to them without delay.

The procedure for revising the Convention was one of the crucial points in the negotiations. Agreement was finally reached on an *ad hoc* system although the opinion was also expressed that the matter should be entrusted to the Disarmament Committee. A conference is to be convened at the request of the majority of the States parties to the Convention (but at least eighteen States, as some felt it to be unacceptable for only eleven States to possess such powers).

Revision of the Convention and its Protocols is to be decided solely by the States which are parties to them, while the addition of further Protocols may be decided by all those States attending such a Conference. Though there is no explicit mention of the fact, the Conference would probably reach its decisions by consensus, as did the Conference which produced the Convention, and this should make it impossible, even for revision of the existing instruments, for decisions to be made on the basis of a majority of the moment.

A Conference will probably be held at least once every ten years, since, if a period of this duration has elapsed without a Conference, a request from only one of the High Contracting Parties is sufficient for the depositary to be obliged to convene a Conference.

Establishment of this procedure was imperative, as it gives lasting value to the Convention by leaving the door open for the introduction of other restrictions and by urging all States to practise constant vigilance to ensure that conventional weapons conform with the principles laid down in the Protocol I of 1977. The revision method also represents a valuable addition to Article 36 of Protocol I, which binds all Contracting Parties to examine all new weapons to make sure their use is not prohibited by international law.

a) *Protocol on Non-Detectable Fragments (Protocol I)*

This Protocol has little immediate importance, since the weapons concerned have not been used-or in any case not widely-up to now. But it constitutes a ban for the future and should prevent undesirable developments. The prohibition is an expression of the principle that the purpose of a weapon should not be to hinder the healing of wounds it causes, and this principle is certainly one of the basic elements for determining whether a weapon produces "unnecessary suffering".

b) *Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Protocol II)*

The purpose of Protocol II is to prevent or at any rate to reduce as far as possible loss and damage to civilians by the devices it covers, during hostilities and afterward, when those devices no longer have any military usefulness. The Protocol deals with a very definite problem: even today, many civilians are still being injured by mines, long after the events which led to the sowing of the minefield.

The Protocol does not tackle the awkward problem of mines laid during war at sea, a problem still covered by Conventions adopted at the beginning of the century. It might be thought, incidentally, that it is high time to consider updating international humanitarian law applicable to armed conflicts at sea.

In Article 3, Protocol II applies to the devices with which it is concerned the general principles which prohibit attacks on civilians and their property and indiscriminate attacks. This means that the use of certain booby-traps specially designed to attract civilians, or even children, is totally prohibited (see Article 6), while restrictions are laid on the use of mines, booby-traps and "other devices" defined in Article 2 (cf. Art. 4 and 5). A distinction is made between devices put in place from nearby and those delivered from a distance, i.e., "delivered by artillery, rocket, mortar or similar means or dropped from an aircraft". Those dropped from the air, especially, are very difficult to neutralize when they have ceased to fulfil their military function. The problem was solved by requiring either that they be supplied with a mechanism which makes them inactive after a certain lapse of time or that they be launched or dropped with sufficient precision for their positions to be recorded with accuracy. However, there was no agreement on more precise rules which might have determined, in particular, the height from which it was admissible for an aircraft to drop such mines.

Another aspect of this Protocol which should be stressed is the "international co-operation in the removal of minefields, mines and booby-traps" (Article 9). It is essential, if civilians are to be properly protected, for the parties to the conflict to collaborate, once active hostilities are over, by at least providing information concerning the mines they have laid. The text adopted does not go as far as was initially envisaged. In particular, it does not include the obligation to hand over, immediately after the cessation of active hostilities, charts showing the location of mines, even, to an occupying Power. Such an obligation was intended solely to give adequate protection for the civilian population, including those within occupied territory. Some delegations, however, found it impossible to envisage any co-operation whatever with an occupying force, even for humanitarian purposes.

Several of the rules in this long Protocol are consequently not very rigorous. For example, we may note that Article 3, paragraph 4, requests the parties to take "all feasible precautions" to protect civilians, that is, "those precautions which are practicable or practically possible taking into account all circumstances ruling at the time, including humanitarian and military considerations" ; that advance warning is obligatory before remotely-delivered mines are launched or dropped "unless circumstances do not permit" (Article 5 (2)); that the parties "shall endeavour to ensure" the recording of the location of minefields which were not pre-planned (Article 7 (2)).

The indecisive and complex character of the rules finally adopted indicates how acute were the problems encountered. Mines undeniably play -an important part in military activities, but their indiscriminate use gives rise to inadmissible loss and damage to civilians. Protocol

II is a typical offspring of the arranged marriage between military necessity and humanitarian imperatives, a union which has produced the whole of international humanitarian law. The legal protection of civilians against the effects of mines, booby-traps and other devices is far from perfect, but it is definitely better than it was.

c) *Protocol on the prohibitions or restrictions on the use of incendiary weapons (Protocol III*)

Incendiary weapons are probably the conventional weapons which have the greatest impact on public opinion. Many felt that any agreement on conventional weapons which did not include a Protocol on incendiary weapons would have the distressing appearance of a fire-brigade which had forgotten to bring the hose-pipe. If nothing had been achieved on this subject, it is likely that all the work of the Conference would have been wasted. This is a further reason to welcome the agreement finally obtained, during the last few days of the Conference, on this category of weapons.

Protocol III applies to incendiary weapons the general principle, reaffirmed in the 1977 Protocol I, that civilians should not be subject to attack. But it takes a big step further by placing severe restrictions on attacks on military objectives located within a concentration of civilians and particularly by prohibiting completely any attacks by air on such objectives. This provision is intended to prevent the terrible danger of huge concentrations of civilians being wiped out by fires.

Forests and plant cover are civilian property unless used for military purposes, and their protection is therefore included in the general rule prohibiting attacks on civilian property. Nevertheless, it was considered desirable to give prominence to this protection by mentioning it specifically, in view of the potentially disastrous nature of forest fires.

It will be noted that there is no provision to protect combatants against incendiary weapons. This is because emphasis was placed on the indiscriminate nature of these weapons and on the danger they present for civilians, rather than on their cruelty, an aspect which would have justified restriction of their use against combatants also.

Of course it may be argued that combatants are generally better equipped and can therefore deal more efficiently with the use of incendiary weapons. But among combatants too there have been extremely cruel burns, and several delegates regretted that no agreement could be reached after all on protecting combatants. A resolution on the subject was drafted by the Conference and sent to the UN General Assembly. This text "invites all governments to continue the consideration of the question of protection of combatants against incendiary weapons with a view to taking up the matter at the conference that may be convened in accordance with the provisions of Article 3 of the Convention adopted. "

2. Resolution on Small-Calibre Weapon Systems

The Conference did not produce a Protocol on small-calibre projectiles which tumble upon impact and transfer considerable energy into the victim's body, thus causing extremely cruel wounds. But at its first session it adopted a resolution inviting governments to carry out further research and appealing to all governments "to exercise the utmost care in the development of small-calibre weapon systems, so as to avoid an unnecessary escalation of the injurious effects of such systems".

One of the major working documents distributed at the Conference emphasizes that research at present is being carried on in two directions : one, to find a medium capable of being used to simulate living tissue, the other, to evolve a simple test to determine the energy-transfer characteristics of a projectile.

V. SCOPE

The attempt to place the Convention of 10 October 1980 and its three Protocols in their context indirectly raises the question of their scope.

Obviously, the Convention, like the rest of international humanitarian law, does not claim to resolve any political problems. At most it could be argued that the moderation which it introduces into conflict is a factor favouring settlement.

The significance of a Convention of this kind, therefore, is purely humanitarian. Its relation is solely to men, women and children who would otherwise have been blown to pieces by mines, had their faces mutilated by booby-traps or their bodies burned by napalm. Those who have been saved from these weapons will remain unknown, unlike those who, in spite of all efforts, will become victims. It is a peculiarity of such prohibitions that their merit is truly known through being breached.

Yet the potential victims who are spared because of the new law do exist. This is the firm belief and sole guiding motive of those who work for the development of international humanitarian law.

The link between the instruments adopted on 10 October 1980 and Protocol I of 8 June 1977 additional to the Geneva Conventions has not been settled categorically. It seems logical, however, to consider these restrictions and prohibitions as rules intended to put into concrete terms some of the principles laid down in the 1977 Protocol I, particularly in its Articles 35 and 51. Moreover, several points of the Convention's preamble give a clear indication in this direction. Yet it cannot be claimed that the prohibitions follow so naturally from the principles reaffirmed by the 1977 Protocol that an obligation concerning them existed before they were explicitly formulated. The protracted negotiations which were necessary to achieve these instruments plainly demonstrate that their content was by no means an obvious matter. So the Convention and its Protocols should be considered as a development of law and any condemnation of action taken previous to their enactment, by retroactive application of their underlying philosophy, would be, juridically, as sterile as it would be inadmissible.

We have already noted the conditions necessary for the Convention and its Protocols to be formally applicable. In particular, we have seen that they are to be applied only in international conflicts. Nonetheless, it seems undeniable that texts of this kind also carry great weight outside their official legal context.

The method of consensus, used very frequently in international conferences nowadays, undoubtedly confers a certain weight, in international circles, on the agreements reached at such conferences. The Vienna Convention on treaty law, very often cited well before it came into force, is a good example of this. But such a situation is true even more of humanitarian instruments. If States are agreed on the specially cruel character of certain weapons or certain combat methods and on the necessity of prohibiting them, can they decently fail to take such agreement into account even before they are legally bound to do so ? In this connection, it is interesting to note that a draft resolution which the Conference sent to the UN General Assembly "calls upon all States which are not bound by the present Convention and which are engaged in an armed conflict, to notify the Secretary-General of the United Nations that they will apply the Convention and one or more of the annexed Protocols in relation to that conflict, with respect to any other party to the conflict which accepts and abides by the same obligations.

But although the Convention is applicable in principle only in international armed conflicts, it is improbable that governments will feel free to use against their own population, in conflicts not of an international nature or in internal unrest, weapons and combat methods which they have agreed to forgo against an alien enemy.

In international humanitarian law, more than in any other sphere, public opinion would demur at any recourse to purely legal arguments for refusing to observe principles whose value had been widely acknowledged. An interesting fact reported by various technical experts is that the discussions and trials carried on by experts in relation to small-calibre weapon systems, although they have not yet resulted in binding prohibitions or restrictions, have nevertheless had a beneficial influence on several States when renewing their stock of weapons of this kind. (See also the resolution on the subject adopted by the Conference, the text of which is given below)

VI. CONCLUSIONS

The adoption on 10 October 1980 of a Convention and three Protocols marks the completion of a significant phase in the evolution of international humanitarian law, a phase whose prime purpose has been to provide better legal protection for the civilian population against the effects of hostilities. In order to accomplish this, it was felt essential to reintroduce into international humanitarian law, without ambiguity, principles concerning the conduct of hostilities which had been laid down at the beginning of this century, at The Hague Conferences in 1899 and 1907, and to develop those principles. This was done in the 1977 Protocols additional to the Geneva Conventions. But the principles alone, without precise rules to buttress them, were in danger of remaining mere words, and the merit of the Convention of 10 October 1980 and its three Protocols is that they have tackled the problem directly and specifically. In this sense, the instruments are valuable, or rather indispensable, supplements to the 1977 Protocols.

While the reaffirmation in international humanitarian law of principles concerning the conduct of hostilities was intended chiefly to give better protection for the civilian population, it must be acknowledged that these principles were originally formulated, above all, to alleviate the suffering of combatants. Simplifying the matter, it may be said that methods or means of combat having indiscriminate effects are prohibited because there is too great a risk of their harming the civilian population, while the ban or restriction on excessively cruel weapons takes into account combatants as well as civilians. Mines may be placed in the first category, non-detectable fragments in the second. Even so, there are weapons, such as incendiary weapons, which may be classified, depending on which aspect is considered, in one or other of these categories. The restrictions placed on the use of these weapons in Protocol III are motivated by the indiscriminate character of such weapons and the risk that they may injure civilians. Yet the reason that several delegations expressed the wish to continue work on the subject was that they considered these weapons-or some of their uses, at any rate-to be excessively cruel and for this reason wanted combatants also to be granted protection.

We have seen that some international value must undeniably be attributed to the instruments which have just been adopted, regardless of when they enter into force. Yet it is plain that formal accession to such instruments gives them much more weight and that lack of interest by the States might well lead to their being forgotten. It is to be earnestly hoped that the States will sign and then ratify these instruments rapidly and in very large numbers. Incidentally, many States refused to ratify the 1977 Protocols until or unless they were supplemented by an instrument concerning weapons. For those States, as for the great majority of others, the adoption of the Convention of 10 October 1980 and its Protocols should be the occasion of acceding to the "whole of the corpus of modern international humanitarian law. The phase just completed was essential to maintain the credibility of this law. The States which have patiently worked together to produce the Convention should now, by acceding to it, indicate their determination to respect its humanitarian principles and rules.

The texts adopted in 1980, like those of 1977, indicate that the world is horrified by the massacre and mutilation of millions of civilians during the conflicts of our century. These texts are the result of patient effort and we should welcome their adoption. But progress made in inter-national humanitarian law is never completely satisfactory: there is always the question whether it could not have been taken a step further, whether more lives could have been saved, more suffering avoided. Alongside the advances made, hovvever substantial, there is the shadow of those which have perhaps failed to come into being for lack of perseverance or persuasion.

The mixed feelings which greet any advance in international humanitarian law, however, are due to deeper causes, to be found in the nature of that law, able only to relieve and not eliminate the absurd suffering engendered by armed conflicts. In our time, as never before, the necessity of attacking the causes of evil and not merely its effects is obvious to everyone. The extent of the probable consequences of any large-scale conflict makes any efforts to attenuate them appear derisory. Those engaged in such efforts, therefore, even though convinced of the nobility of their task, must regard it as a contribution to peace and an urgent appeal to those capable of achieving it.

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Recent studies on the protection of the environment in time of armed conflict

by Antoine Bouvier[1]

"War and preparation for war are a major source of environmental damage which must be subjected to greater accountability and control".[2]

Contents

Introduction

The problem of protecting the environment in time of armed conflict has given rise to numerous discussions and major studies over the last two years.

In our opinion, there are at least two distinct reasons for the keen interest in this question. In the first place it is quite logically a response to the increasingly energetic efforts to improve, both nationally and internationally, the protection of the environment in peacetime.[3] Secondly, this interest reflects the fears engendered during and after the 1990-1991 Gulf war that set the Middle East ablaze.

At that time, governments and public opinion realized more than ever before how dangerous modern warfare can be for the natural environment.

Quite a lot of legal and ecological issues arising from this conflict still remain unsettled. It is as yet impossible to make a conclusive "ecological assessment" of it: nature evolves slowly

[1] The views expressed here are those of the author alone and do not necessarily reflect those of the International Committee of the Red Cross.
[2] Statement by Mr, Maurice Strong, Secretary-General of the United Nations Conference on Environment and Development, made during the Conference opening ceremony on 3 June 1992 in Rio de Janeiro.
[3] For an in-depth analysis of the development of international environmental law see: Kiss, A. and Shelton, D.: *International environmental law*, Transnational Publishers, Inc., London, 1991.

and a longer period of observation is required before an accurate analysis of the environmental damage caused by the conflict can be completed.[4]

For reasons which do not come within the scope of this article, the most pessimistic forecasts have fortunately failed to materialize and some of the most spectacular instances of environmental damage (if not indeed the most serious, for example the burning of the Kuwait oil wells), had less lasting effects than was feared. This relatively fortunate development did not however affect the work to improve the protection of the environment in time of armed conflict that was begun immediately after the close of hostilities.[5] On the contrary, this work was intensified and the issue has recently appeared on the agenda at several international conferences.

The purpose of the present article is not to analyse the regulations governing the protection of the environment in time of armed conflict[6] or to examine the special case presented by the 1990-91 Gulf war.[7]

Its objective rather is to present the results of some recent studies on the protection of the environment in time of conflict.

To this end, consideration will be "given in turn to the work of a meeting of experts convened by the International Committee of the Red Cross in April 1992, the discussions of the Rio Conference on the protection of the environment in time of conflict and the main results of the second meeting to review the ENMOD Convention[8] which was held in September 1992.

Some aspects of the current discussions in the Sixth Committee of the United Nations General Assembly will also be examined.

I. Meeting of experts convened by the ICRC (Geneva, 27 -29 Apri1 1992)

Since the ICRC has been mandated by the international community “to work for the understanding and dissemination of knowledge of international humanitarian law [...] and to

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[4] In this connection see *The Environmental Legacy of the Gulf War, a Greenpeace Report, 1992*. The report also includes a close analysis of already known instances of environmental damage.

[5] For further information on these initial studies, see Bouvier, A.: "The protection of the natural environment in time of armed conflict", *IRRC*, No.285, November-December 1991, p. 570, footnote 14.

[6] For this, see the article by Philippe Antoine, "International humanitarian law and the protection of the environment in time of armed conflict", published in the present issue of the *Review*, pp. 517 -537. See also Bothe, M., "The protection of the environment in times of armed conflicts: Legal rules, uncertainty, deficiencies and possible developments in the *Report on the work of the meeting of experts on the protection of the environment in time of armed conflict*, ICRC, Geneva, September 1992; Bouvier, A., *op. cit*.; Falk, R.: "The Environmental Law of War: an Introduction" in Plant, G. (ed.). *Environmental Protection and the Law of War*, Belhaven Press, London and New York, 1992, pp. 78-95; Saalfeld, M., «Umweltschutz in bewaffneten Konflikten aus völkerrechtsgeschichtlicher Sicht", in *Humanitäires Völkerrecht*, No.1, 1992, pp. 23-31.

[7] In this connection see the article by Adam Roberts, "Destruction of the environment during the 1991 Gulf War" published in this issue of the *Review*, pp. 538-553. See also: Fauteux, P., "Environmental Law and the Gulf War" in *International Union for the Conservation of Nature Bulletin*, Vol. 22, No.2, September 1991, pp. 26-27; Terry, J., "The Environment and the Laws of War; the Impact of Desert Storm", in *Naval War College Review*, Vol. XLV, No.1, pp. 61-67.

[8] Convention on the Prohibition of Military or any Other Hostile Use of Environmental Modification Techniques.

prepare any development thereof",[9] it is naturally directly concerned by the problem of the protection of the environment in time of armed conflict.

It has accordingly taken part in work devoted to this subject after the 1990-1991 Gulf war and prepared a report for the 26th International Conference of the Red Cross and Red Crescent[10](Budapest, November-December 1991).[11]

The ICRC's competence as regards the protection of the environment in time of armed conflict was, moreover, explicitly endorsed at the 46th session of the United Nations General Assembly (1991): in General Assembly decision 46/417 the ICRC was invited to continue its work in this area and to report to; the 47th session. (See Chapter IV below.)

To discharge this mandate, the ICRC convened a meeting of experts to study the problem of protection of the environment in time of armed conflict. The meeting, which was held in Geneva from 27 to 29 April 1992, brought together some thirty experts from the armed forces, academic circles, the scientific community and governments as well as representatives of governmental and non-governmental organizations. All were invited on a personal basis.[12]

The goals of the meeting were as follows:

1. to define the content of existing law; I
2. to identify the main problems involved in implementing this law;
3. to identify any gaps in existing law;
4. to determine what should be done in this area.

It is obviously not possible here to cover all the discussions at the meeting or go into the experts' conclusions in detail (some of their conclusions were of a provisional nature because certain questions require further examination).

The following account therefore gives only the main points discussed.

The importance and relevance of the currently applicable rules (whether of treaty-based or customary international humanitarian law, environmental law or rules based on the principles of public international law governing international responsibility) were clearly reaffirmed. The experts expressed the opinion that if these rules are sufficiently known, implemented and respected, they should effectively, protect the environment. In that connection, the experts insisted on the; need to spread knowledge of them as widely as possible during peacetime, particularly through the use of *handbooks* specifically intended for members of the armed forces.

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[9] See the Statutes of the International Red Cross and Red Crescent Movement, Article 5 g).

[10] Doc. C.I/4.2/l: Implementation of IHL, protection of the civilian population and persons *hors de combat*, pp. 15-23.

[11] This conference finally had to be postponed to a later date. An explanation for this postponement is given in an article by Y. Sandoz: " A propos of the postponement of the 26th International Conference of the Red Cross and Red Crescent", *IRRC* No.286, January-February 1992, pp. 5-12.

[12] The report on the meeting is entitled "Meeting of experts on the protection of the environment in time of armed conflict. Report on the work of the meeting", ICRC, Geneva, September 1992. Cf. a]so Doc. UN A/c//328 of 31 July 1992 "Protection of the environment in times of armed conflict", Report of the Secretary General, pp. 11-14. The meeting was also reported in UNIDIR Newsletter, No.18, July 1992, pp. 46-47.

The experts then examined the applicability during conflicts of the rules of *international environmental law*. Although the provisions of this law are intended a *priori for peacetime*, most of the experts agreed that they could be presumed to be applicable also during armed conflict.

While acknowledging the- importance of the existing law, the experts also came to the conclusion that there was a need to clarify certain aspects of applicable law in order to adapt it more closely to the realities of modern conflicts; the protection of the environment during *non-international armed* conflict was mentioned as one of the areas in which clarification was imperative.

The experts also agreed with certain proposals to *develop the law*. They supported the proposal put forward by some of them to protect *nature reserves* which, subject to conditions that remain to be set, could be likened to demilitarized zones or other protected areas.

The meeting drew up a list of the main legal questions which deserved attention.[13] They included the role and exact scope of the rules of customary law protecting the environment; interpretation of the applicable treaty-based rules (in particular those of the 1977 Additional Protocol I and the provisions of the ENMOD Convention); the balance which should be preserved between military necessity and the protection of the environment; and the question of international responsibility in the event of serious damage to the environment.

For lack of time, it was not possible to examine all these questions and further studies will have to be undertaken before final conclusions can be reached. The meeting did however provide an opportunity to analyse certain delicate questions in depth and the result has been, by and large, encouraging.

II. United Nations Conference on the Environment and Development (Rio de Janeiro, 3-14 June 1992)

The Conference, which was the outcome of very long and arduous preparations, reviewed most of the questions concerning *development, the protection of the environment*, and the links between these two complicated issues.

Given the Conference's extensive agenda -which included such sensitive issues as *technology transfer-weather modification* and *sound management of biotechnology*, to cite but a few examples –the specific subject of protecting the environment in time of conflict naturally occupied only a marginal position.

Nevertheless, this subject gave rise to a major exchange of views, both during the preparatory meetings and during the Conference itself.

(a) Conference Preparatory Committee

[13] This list appears as Annex 5 in the report on the proceedings of the meeting (cf. footnote 12 above).

The protection of the environment in time of conflict was discussed during the third meeting of the Preparatory Committee (Geneva, 12 August -4 September 1991) after a report had been submitted on the "environmental assessment of the Gulf crisis".[14]

On that occasion, the Secretary-General of the Conference, Mr. Maurice Strong, said he was convinced that "much strengthened measures to prevent deliberate damage to the environment as an instrument of war must be put in place".[15]

The ICRC, which was invited to present the main legal provisions relating to the protection of the environment in time of conflict,[16] reaffirmed the usefulness and importance of the existing rules and stressed the need to find ways of improving their implementation and compliance with them.

There were few proposals to establish new rules; instead, the participants at the meetings of the Preparatory Committee underscored the importance and relevance of existing law and the need for greater compliance with it.

This view is clearly reflected in the following two draft articles directly concerning the protection of the environment in time of conflict which the Preparatory Committee submitted to the Rio Conference for adoption:

1. ***Principle 24 of the Rio Declaration:*** "Warfare is inherently destructive of sustainable development. States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary."

2. ***Paragraph 39.6 (a) of Agenda 21:*** "[In view of the importance of full compliance with the relevant rules of international law, all appropriate means should be considered to prevent wilfully caused large-scale destruction of the environment [in times of war], which cannot be justified under international law. The General Assembly and its Sixth Committee as well as, in particular, the expert meetings of the International Committee of the Red Cross. are the appropriate forums to deal with this subject.]"[17]

(b) The Rio Conference

As was to be expected (see above) the Rio Conference "dedicated only marginal attention to the problem of the impact of warfare on the environment".[18]

However this subject came up on several occasions during the *general discussions*.[19] Several speakers pointed to the seriousness of damage to the environment in time of conflict and

[14] 14 Environmental Assessment of the Gulf Crisis, Report of the Secretary-General of the Conference, doc. A/CONF. 151/PC/72 of 15 July 1991.
[15] Cf. doc. *Opening Plenary Statement,* Prep. Com. III, Mr. Maurice F. Strong, 26 August 1991.
[16] Cf. doc. *Protection of the natural environment in time of armed conflict, all overview of IHL and of the position of the ICRC,* Geneva, 19 August 1991.
[17] Cf. doc. A/CONF.151/PC/WG III/L.32 as revised.
[18] Cf. Lamazières, G.: "The impact of warfare on the environment and related themes at the United Nations Conference on Environment and Development" in *UNIDIR Newsletter* No. 18, July 1992, p. 15.

stressed "the inherent danger to the environment associated with armed conflict".[20] Here, too, few delegations opted for developing the law, with most of them calling for greater compliance with it.[21]

The most important discussions took place within the *Contact Group on Legal Instruments*, whose task was to examine the articles in Chapter 39 of Agenda 21 on which views diverged.

After difficult negotiations, a modified version of paragraph 39.6 (a) (see above) was finally adopted by consensus.

The following text was then submitted to Plenary: "Measures in accordance with international law should be considered to address, in times of armed conflict, large-scale destruction of the environment that cannot be justified under international law .The General Assembly and its Sixth Committee are the appropriate forums to deal with this: subject. The specific competence and role of the International Committee of the Red Cross should be taken into account".
At the *closing sessions* of the Conference, Principle 24 of the draft Rio Declaration[22] and paragraph-'39.6 (a) as amended by the Contact Group[23] were adopted without modification; they mark the progress achieved in the Rio Conference's work to protect the environment in time of armed conflict.

These two articles make no appreciable change in the existing law; they do however testify to a heightened awareness of the risks which warfare entails for the environment. Moreover, the second article has the advantage of defining the framework in which this work will have to be continued.

III. Second Review Conference of the Parties to the ENMOD Convention (Geneva, 14-18 September 1992)

On 10 December 1976 the United Nations General Assembly adopted the ENMOD Convention. Its purpose is to prohibit the military or any other hostile use of "environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party" {Article I).

Within the meaning of Article II, the types of damage to the environment prohibited by the Convention are those which result from "any technique for changing -through the deliberate manipulation of natural processes -the dynamics, composition or structure of the Earth ".[24]

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[19] Cf. in particular the statement by the Secretary-General of the Conference, from which the quotation at the beginning of this article is taken, and those of the Swedish, Iranian, Hungarian, Saudi Arabian, Swiss and ICRC delegations.
[20] Cf. statement by the representative of Saudi Arabia.
[21] For instance Switzerland: "(...) certainly a large body of written and customary rules exists (...). However all too often these rules are misunderstood, misapplied or interpreted in different ways. States (...) have the obligation to respect them and ensure that they are respected under all circumstances."
[22] Cf. doc. NConf.151/5/Rev.l.
[23] Cf. doc. NConf.151/L.3/Add.39.
[24] For a more in-depth analysis of the origins and contents of the ENMOD Convention cf. Goldblat, J.: "The Environmental Convention of 1977: an analysis" in A. Westings, ed: *Environmental Warfare*, SIPRI/Taylor and Francis, London 1984, Chapter 5, pp. 53-64; moreover, *UNIDIR Newsletter* No.18, July 1992 includes several articles on this treaty.

Article VIII of the Convention makes provision for a periodic review of the operation of the Convention. An initial Review Conference was accordingly organized in Geneva in September 1984.[25]

The damage to the environment during the 1990-1991 conflict revived controversy about some aspects of the ENMOD Convention. In this connection, it will be recalled that the main objection raised by some specialists to this treaty was that it regulated only the use of future techniques (unrealistic in the opinion of some) and dismissed from its field of application environmental damage caused by "conventional" methods of warfare.

Some States requested a Second Review Conference to be convened precisely to remedy these shortcomings and update the Convention. After a Preparatory Committee[26] had met, the Conference was convened in Geneva from 14 to 18 September 1992.

(a) Participation in the Second Review Conference

Forty States party attended the Conference. In addition, ten non-party States and six specialized organizations, including the ICRC, were granted observer status.

(b) Participants' proposals

As it is not possible to include here all the proposals submitted to the Conference, only the most important ones are outlined below.

1. Many delegations raised the question of the Convention's applicability to environmental damage of the type caused during the Gulf war in 1990-1991. Most of the speakers admitted that, from a strictly legal point of view (irrespective of the fact that several of the warring parties were not party to the treaty), the Convention was not applicable since the very rigid criteria laid down in it did not apply to the damage which occurred. This state of affairs was deemed unacceptable by some delegations who wanted the scope of the Convention enlarged.

2. To that end, several delegations proposed that the definition of prohibited damage be specified and expanded; that the threshold of applicability (in particular, the criteria as to *widespread, long-lasting or severe effects*) be lowered and that all serious damage to the environment (and not only that caused by high-tech weapons) be henceforth prohibited by the Convention.

3. Most of the delegations felt that the Convention needed to be adapted to the realities of contemporary conflicts and that the new Convention should include rules on chemical weapons.

4. Several delegations expressed the hope that *research* into environmental modification techniques should henceforth be prohibited.

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[25] A summary of the work of the First Review Conference appears in doc. ENMOD/CONF.II/2 of 3 August 1992: "Summary of negotiations leading to the conclusion of the Convention (:::) and of subsequent developments related to the Convention.

[26] Cf. ENMOD/CONF.II/1 of 10 April 1992: Report of the Preparatory Committee of the Second Review Conference.

5. Most of the delegations also thought that the use of *herbicides* should be more closely regulated.

6. Numerous proposals were also made as to implementation of the Convention; thus it was proposed to set up inquiry and monitoring mechanisms and to establish a committee of experts.

7. Several delegations also insisted on the importance of prevention by making the Convention's rules as widely known as possible.

8. Several proposals were also made in connection with sanctions, including one that a link be established between violations of the Convention and the concept of international crime.[27]

9. There was unanimous regret that to date so few States (only 55) had agreed to be bound by the Convention.

(c) Results of the Conference[28]

Although consensus[29] was not reached on many substantive proposals, the Conference did however clarify some aspects of the Convention and widen its sphere of application to some extent. Amongst the most encouraging results can be cited:

1. The interpretation given to Article I, according to which "all research and development on environmental modification techniques as well as their use should be dedicated solely to peaceful ends".[30]

2. The reaffirmation of the interpretation whereby -under certain conditions -the use of *herbicides* could be equated with environmental modification techniques prohibited tinder Article II of the Convention.[31]

3. The establishment of a group of experts to clarify the scope and application of the Convention.[32] This group, whose composition is defined in Article V, para. 2, will have to take into account the work done by the Sixth Committee of the General Assembly and by the ICRC.

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[27] For an analysis of this concept, cf. *Report of the International Commission on the work of its forty-third session*, doc. A/46/10, New York, 1991, pp. 300-302.
[28] Cf. doc. ENMOD/CONF.II/ll of 17 September 1992: *Final Document of the Second Review Conference*, Part II, pp. 9-14.
[29] Cf. Doc. ENMOD/CONF. II/11 , Annex IV of 17 September 1992: "Proposals and ideas presented at the Conference which did not enjoy consensus for inclusion in the Final Declaration".
[30] Cf. *Final Document*, p. 11.
[31] *Ibid*.
[32] *Ibid*, p. 13.

Protection of the natural environment in time of armed conflict
by Antoine Bouvier

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"The deterrence of, and response to, environmental attacks are new dimensions to national security challenges".[2]

Contents

I. Introduction

Since the early 1970s, the steady deterioration of the natural environment has given rise to widespread awareness of man's destructive impact on nature.

This awareness of the vital importance for humanity of a healthy environment and the determined efforts of numerous environmental protection agencies have led over the years to the adoption of a large body of laws for the protection and preservation of the natural environment.

Concern for the environment - and the codification of rules for its preservation - first emerged at national level.

It led to the adoption of abundant legislation for the protection of the environment as such or of its various components (such as water, air and forests). Many States also adopted *constitutional* rules protecting the natural environment.[3]

However, States and specialized agencies realized fairly rapidly that purely national environmental policies were inadequate in view of the magnitude and the transnational nature of many environmental problems, and that it was essential to adopt *international* rules.

Environmental protection, or conservation, was therefore placed on the agenda of many institutions active in the field of international law. Their efforts have resulted in the adoption of a substantial and constantly growing body of rules, known as *international environmental law*. These rules cover a wide range of issues, including the prevention of environmental damage and the promotion of international co-operation in dealing with its effects.

It would be impossible here to examine in detail all the rules of international environmental law (which, of course, were conceived mainly for application in peacetime). We shall therefore mention only the two fundamental principles underpinning that law.

The first principle is *the obligation for States to avoid causing environmental damage beyond their borders.*

This principle has been affirmed in several legal decisions .[4] It is also expressly mentioned in various international treaties[5] and many other legal texts.[6]

The second principle is *the obligation for States to respect the environment in general.* Like the first principle, it is set forth [7] in various treaties and bilateral, regional and international agreements.

Environmental protection was later raised in the more specific context of *international human rights law*. It is now recognized that personal growth and happiness - fundamental human rights - cannot be achieved in a severely damaged environment.[8] The *right to a healthy natural environment* is thus gaining increasingly wide acceptance as a fundamental human right. It is expressly provided for in various international treaties,[9] other legal texts and the constitutions of many States.[10]

At this point in our review of provisions for the protection of the environment in peacetime, it should be mentioned that environmental protection has also been a major concern of the International Red Cross and Red Crescent Movement, as demonstrated by various resolutions[11] and numerous studies.[12]

The emphasis placed on environmental protection during the most recent work on the codification of *international humanitarian law* (IHL) was both a natural and a logical development. It was natural because the trends that shape the legal rules applicable in peacetime often influence the development of the law of war, and *logical* in view of the extremely serious environmental damage caused by certain methods and means of modem warfare. Section 11 of this article contains a summary of the major rules of IHL for the protection of the environment in wartime.

Environmental damage in wartime is inevitable. Throughout history, war has always left its mark, sometimes extremely long lasting, on the natural environment. Today some battlefields of the First and Second World Wars, to give only two examples, remain unfit for cultivation or dangerous to the population because of the unexploded devices (especially mines) and projectiles still embedded in the Soil. [13]

The rules of IHL for the protection of the environment therefore aim not to prevent damage altogether, but rather to limit it to a level deemed tolerable. Unfortunately, there is reason to fear that the use of particularly devastating means of warfare (whose effects are often still unknown) could wreak such large-scale destruction as to render illusory the protection afforded civilians under IHL. Indeed, severe environmental damage could seriously hamper or even prevent the implementation of provisions to protect the victims of armed conflict (the *wounded,* the *sick*, *prisoners of war or civilians*). For these reasons alone, respect for and compliance with the rules of IHL for the protection of the environment are crucial.

All these issues suddenly assumed new urgency during the conflict that set the Middle East ablaze in 1990-991.

In the wake of that crisis, many questions were raised about the content and scope of and possible shortcomings in the rules of IHL for the protection of the environment in time of armed conflict. These questions were discussed at several meetings of experts in humanitarian law and environmental protection.[14] In spite of the high level of the discussions, it proved impossible to reach any final conclusions because of the difficulty in establishing various basic data, such as a scientific assessment of the environmental damage caused by modem warfare [15] and a thorough analysis of the content and limitations of the rules in force.

However, the following provisional conclusions were drawn:

(a) the 1990 -1991 Middle East conflict is too narrow a frame of reference for setting standards since environmental damage in wartime can take many forms;

(b) certain issues should nevertheless be examined with a view to solving problems of interpretation of the rules in force and possibly filling loopholes in the law;

(c) the rules of IHL currently in force could substantially limit environmental damage, providing they are correctly complied with and fully respected.

II. Rules of law for the protection of the environment in time of armed conflict

Most of the customary rules, treaty provisions and general principles for the protection of the environment in time of armed conflict are mentioned below, and the most important are discussed in some detail.

It should be pointed out here that, although the concept of the environment as it is understood today did not emerge until the 1970s, many of the general rules and principles of IHL (often dating much further back) contribute to protecting the environment in wartime.

A. General principles

The most important general principle of humanitarian law in the present context is the one according to which the right of the Parties to the conflict to choose methods or means of warfare is not unlimited. This basic principle, which was first set forth in the Declaration of St. Petersburg in 1868, has been frequently reiterated in IHL treaties, most recently in Protocol I of 1977 additional to the Geneva Conventions (Art. 35, para. 1).

The rule of proportionality is another basic principle of IHL which underlies many of its provisions.[16] Like the first principle mentioned, it clearly applies as well to protection of the environment in time of armed conflict. [17]

B. Treaties affording the environment indirect protection

First of all the term "indirect protection" of the environment should be defined. Until the early 1970s IHL was "traditionally [...] anthropocentric in scope and focus". [18] Indeed, IHL texts adopted before then made no reference to the environment as such (the concept did not even exist at the time). Nevertheless various provisions relating, for example, to private property or the protection of the civilian population, afforded the environment some protection.

Such provisions are found in many international treaties and most of them have now become customary law. As it is impossible to review all the relevant instruments here, we shall focus on the major ones.

The importance of the general principles stated in the 1868 St. Petersburg Declaration has already been mentioned. The Hague Convention respecting the Laws and Customs of War on Land (Convention No. IV of 1907) reaffirms and expands on those principles[19]. Its annexed Regulations contain a provision, namely, Art. 23 para. 1(g), that illustrates perfectly the aforementioned anthropocentric approach. This article, which states that it is forbidden "to destroy or seize the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war", is one of the earliest provisions for the protection of the environment in armed conflict.

Several treaties that limit or prohibit the use of certain means of warfare also contribute to the protection of the environment in armed conflict. These are as follows:

- the Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases and of Bacteriological Methods of Warfare, adopted in Geneva on 17 June 1925;

- the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, adopted on 10 April 1972;

- the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which May be Deemed to be Excessively Injurious or to Have Indiscriminate Effects, adopted on 10 October 1980.

The 1980 Convention is of particular interest for at least two reasons:

First of all, it sets up a mechanism whereby it may be revised or amended (Art. 8). The adoption of an additional protocol relating to the protection of the environment could therefore be envisaged.

Secondly, certain of its provisions, in particular those concerning the use of mines, booby-traps and other devices (Protocol II) and incendiary weapons (Protocol III), contribute directly and specifically to the protection of the environment in time of armed conflict.[20]

Another treaty, namely, the Geneva Convention relative to the Protection of Civilian Persons in Time of War (Fourth Convention of 12 August 1949), in particular Article 53 prohibiting the destruction of real or personal property, provides minimum protection of the environment in case of enemy occupation.

C. Treaties affording the environment specific protection

Two treaties are of major importance:

- the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques ("ENMOD" Convention adopted by the United Nations on 10 December 1976);

- Protocol I of 1977 additional to the Geneva Conventions of 1949.

1. Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques

This Convention was adopted under United Nations auspices, largely in response to the fears aroused by the use of methods and means of warfare that caused extensive environmental damage during the Viet Nam War.[21] It prohibits "military or any other hostile use of environmental modification techniques having widespread, long lasting or severe effects as the means of destruction, damage or injury to any other State Party" (Art. 1).

The term "environmental modification techniques" refers to "any technique for changing - through the deliberate manipulation of natural processes - the dynamics, composition or structure of the Earth (Art. 2).

2. Protocol I additional to the Geneva Conventions of 1949

Protocol I contains two articles pertaining specifically to the protection of the environment in time of armed conflict.

The draft protocols submitted by the ICRC to the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law applicable in Armed Conflicts (CDDH) made no reference to the environment. The two articles in question were introduced at the Conference itself, showing the growing awareness of the importance of respect for the environment that emerged in the early 1970s. [22]

(a) Article 35, para. 3, stipulates that "it is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment".

This article, pertaining to methods and means of warfare, protects the environment as such.

(b) Article 55 provides that:

1. Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population.

2. Attacks against the natural environment by way of reprisals are prohibited".

It should be noted that this article - which is intended to protect the civilian population against the effects of hostilities - is found within the broader context of protection of civilian objects, which is the subject of Part IV, Chapter 111, of Protocol I (Arts. 52-56).

Article 55 does more than merely restate Article 35, para. 3. It establishes a general obligation to protect the environment during the conduct of hostilities, but that obligation is directed to the protection of civilians, whereas Article 35, para. 3, aims to protect the environment as such.[23]

As a logical extension, Article 55 prohibits reprisals against the natural environment in that they would penalize humanity as a whole.

Protocol I contains further provisions contributing indirectly to environmental protection in time of conflict,[24] such as Articles 54 ("Protection of objects indispensable to the survival of the civilian population") and 56 ("Protection of works and installations containing dangerous forces").

3. Link between the provisions of Protocol I and the rules of the Convention on the prohibition of the use of environmental modification techniques ("ENMOD")

These two treaties prohibit different types of environmental damage. While Protocol I prohibits recourse to environmental warfare, i.e. the use of methods of warfare likely to upset vital balances of nature, the "ENMOD" Convention prohibits what is known as geophysical warfare, which implies the deliberate manipulation of natural processes and may trigger "hurricanes, tidal waves, earthquakes, and rain or snow".[25]

Far from overlapping, these two international treaties are complementary. However, they give rise to tricky problems of interpretation stemming in particular from the fact that they attribute different meanings to identical terms, such as "widespread, long-term and severe". To give but one example of such semantic difficulties, the definition of "long-term" ranges from several months or a season for the United Nations Convention to several decades for the Protocol.[26]

Moreover, the conditions of being widespread, long-term and severe are cumulative in Protocol I, whereas each condition is sufficient in and of itself for the "ENMOD" Convention to apply.

There is a danger that such discrepancies might hamper the implementation of these rules. It is therefore to be hoped that the work currently being carried out in the field of environmental protection in wartime (see note 14) will lead to harmonization of the two treaties. [27]

D. Protection of the environment in situations of non-international armed conflict

Despite the obvious threat posed by situations of non-intemational armed conflict, none of the rules of IHL applicable to such situations provide specifically for protection of the environment. A proposal was made at the CDDH to introduce into Protocol II a provision analogous to Article 35, para. 3, and Article 55 of Protocol I, but
the idea was ultimately rejected.[28]

However, the concept of environmental protection is not totally absent from Protocol II. Article 14 ("Protection of objects indispensable to the survival of the civilian population"), which prohibits attacks against "foodstuffs, agricultural areas for the production of foodstuffs, crops, livestock, drinking water installations and supplies and irrigation works", and Article 15, which prohibits any attack against "installations containing dangerous forces [...] if such attack may cause the release of [such] forces", unquestionably contribute to protecting the environment in time of non-intemational armed conflict.

III Conclusion

The destructive potential of the methods and means of warfare already in use or available in the world's arsenals today represents a threat to the environment of a magnitude unprecedented in the history of humanity. Special emphasis must therefore be placed on compliance with and constant development of the rules of IHL for the protection of the environment in time of armed conflict.

Unlike certain other authors,[29] we are not convinced of the need at present to revise all the provisions of IHL for the protection of the environment, although this would become indispensable should new means of warfare be introduced.

Certain issues nevertheless merit detailed study. In particular, attention should be paid - as at the London and Ottawa meetings [30] - to protection of the environment in time of non-intemational armed conflict and to the formulation of rules applicable between a State party to a conflict and a State not party thereto whose natural environment may be affected by the conflict. Further thought should also be given to the suggestion put forward by some experts that nature reserves should be declared demilitarized zones in the event of conflict.[31]

It is generally agreed that the rules of IHL currently in force (see section 11 above) could considerably limit environmental damage in warfare, providing they are correctly applied and fully respected. Therefore, rather than initiating a new and possibly unproductive codification process, a special effort should be made to ensure that these rules are adopted by as many States as possible. It is of paramount importance to ensure implementations of and respect for the existing rules, so that future generations will not be faced with insurmountable problems resulting from damage caused to the environment in time of conflict.

Notes :

1. The views expressed here are those of the author alone and do not necessarily reflect those of the ICRC.

2. "Conduct of the Persian Gulf conflict, an interim report to Congress", Department of Defense, Washington, July 199 1, p. I 1.

3. A list of the States that have introduced such rules into their constitutions can be found in Schwartz, Michelle, "Preliminary Report on Legal and Institutional Aspects of the Relationship between Human Rights and the Environment", Geneva, August 199 1, P. I 1.

4. See "La protection de I'environnement en temps de conflit armé", European Communities, Brochure 54 110/85 slnd, pp. 17-18.

5. See, for example, the Convention on the Law of the Sea of 10 December 1982, Art. 194, para. 2.

6. See, for example, Principle No. 21 of the Declaration of Stockholm adopted on 16 June 1972 by the United Nations Conference on the Human Environment. For a summary of the proceedings of the Conference, see ICRC, No. 141, December 1972, pp. 683 and following, and ICRC, No. 137, August 1972, pp. 468 and following.

7. For a list of these texts, see "La protection de I'environnement en temps de conflit armé", op. cit., pp. 25-30.

8. For a more detailed discussion of this problem, see Schwartz, op. cit., pp. 4-1 1.

9. See, for example, Art. 24 of the African Charter on Human and Peoples' Rights signed in Nairobi in June 1981, which states that: "All peoples shall have the right to a general satisfactory environment favourable to their development".

10. See note 3.

11. Resolution No. XVII, 22nd International Conference, Teheran, 1973; and Resolution No. XXI, 23rd International Conference, Bucarest, 1977.

12. See, for example, Domanska, Irena, "Red Cross and the problems of environment", ICRC, No. 131, February 1972, pp. 73-78; Vigne, Jacques, "The Red Cross and the human environment", ICRC, No. 183, June 1976, pp. 295-300; Schaar, Johan, A Shade of Green: Environment Protection as Part of Humanitarian Action, Henry Dunant Institute Working Paper No. 2:90, Geneva, 1990.

13. For more information see Commentary on the Additional Protocols of 8 June1977 to the Geneva Conventions of 12 August 1949, Eds. Sandoz, Y., Swinarski, C., Zimmennann, B. Eds., ICRC, Martinus Nijhoff Publishers, Geneva, 1987, p. 410, para. 1443 and footnote 84.

14. In particular, a symposium held on 3 June 1991 in London under the auspices of the London School of Economics, the Centre for Defence Studies and Greenpeace International, to assess the need for a fifth Geneva Convention; a meeting of experts convened in Ottawa by the Canadian government on 10-12 July 1991 and the Third Preparatory Committee of the United Nations Conference on Environment and Development (UNCED) held on 12 August - 4 September 1991.

15. Such an assessment is extremely difficult to make since environmental damage can take many forms and some of its effects are not immediately evident. For a partial assessment of the damage caused by the 1990 -1991 Gulf war, see "on impact, modern warfare and the environment, a case study of the Gulf war", Greenpeace International, London, 1991; "Some lessons to be learned from the environmental consequences of the Arabian Gulf war", WWF International, May 1991 (document distributed to the Second UNCED Preparatory Committee); "Environmental assessment of the Gulf crisis", Doe. A/conf./151/PC/72, a report considered by the Third UNCED Preparatory Committee.

16. See, for example, Protocol I of 1977, Art. 35, para. 2; Art. 51, para. 5(b) and Art. 57, para. 2(a) and (b).

17. On the principle of proportionality in relation to the protection of the environment in time of armed conflict, see Bothe, Michael, "War and environment", in Encyclopaedia of Public International Law, Instalment 4, p. 291.

18. See "Note on the current law of armed conflict relevant to protection of the environment in conventional conflicts", p. 1, document prepared in the Office of the Judge Advocate General, Canadian Armed Forces, and distributed to participants at the Ottawa symposium (see note 14).

19. See Art. 22 of the Regulations annexed to the Convention which states that: "The right of belligerents to adopt means of injuring the enemy is not unlimited"

20. For a discussion of these provisions, see Goldblat, Jozef, "The mitigation of environmental disruption by War: Legal Approaches", in Westing, A., (ed), Environment hazards of war, Oslo, London, pp. 53-55.

21. For more background information on this treaty and the negotiations leading up to it, see Commentary on the Additional Protocols, op. cit., p. 413, para. 1448; and Herczegh, Geza, "La protection de l'environnement natural et le droit humanitaire, in Studies and essays on international humanitarian law and Red Cross principles in honour of Jean Pictet, Swinarski, C., ed., ICRC, Martinus Nijhoff Publishers, Geneva, The Hague, 1984, p. 730.

22. Concerning the origin and legislative background of these provisions, see Kiss, Alexander, "Les Protocoles additionnels aux Conventions de Genéve de 1977 et la protection des biens de l'environnement", Etudes et essais sur le droit international humanitaire.... op. cit., p. 182 and following; Herczegh, p. 726 and following; Goldblat, op. cit., p. 50 and following; Commentary on the Additional Protocols, op. cit., pp. 411-412, paras. 1444-1447; and Bothe/Solf/Partsch, New Rules for Victims of Armed Conflicts, Martinus Nijhoff Publishers, The Hague, 1982, p. 344.

23. On the relationship between these two articles and on their role in the Protocol as a whole, see also Herczegh, op. cit., pp. 729-730; Kiss, op. cit., pp. 184-186; Commentary on the Additional Protocols, op. cit., p. 414, para. 1449 and p. 663, para. 2133; Bothe/Solf/Partsch, op. cit., pp. 344-345. Our comments are also based on a report (to be published) presented on 8 June 1991 by Paul Fauteux at a symposium in Paris on the legal aspects of the Gulf crisis. We are grateful to the author for having provided us with a copy of the report.

24. See Bothe, op. cit., p. 292; Kiss, op. cit., p. 186; Commentary on the Additional Protocols, op. cit., pp. 630-675, paras. 1994-2183.

25. See Commentary on the Additional Protocols, op. cit., pp. 416-417, para. 1454 and pp. 412-420, paras. 1447-1462; Kiss, op. cit., p. 187; and Bothe, op. cit., pp. 291-292.

26. See Commentary on the Additional Protocols, op. cit., pp. 415-416, para. 1452. On these differences of terminology, see also Kiss, op. cit., p. 189.

27. From the purely legal point of view, harmonization should not give rise to any major problems. The terms "long-lasting, widespread and serious" were not defined in the two treaties themselves and only a very approximate indication of their meaning was given in the proceedings of the Diplomatic Conferences that led to their signature. It should therefore be possible, as concluded by the experts in Ottawa (see note 14), to reach agreement on the meaning of these terms in accordance with

the general rules of the law of treaties, in particular Arts. 31 and 32 of the 1969 Vienna Convention.

28. See Kiss, op. cit., p. 184 and Goldblat, *op cit*., p. 52.

29. In particular, the promoters of the London symposium on a fifth Geneva Convention (see note 14).

30. See note 14.

31. This suggestion was made at the CDDH, but was not adopted (see Kiss, op. cit., p. 191 and Commentary on the Additional Protocols, op. cit., p. 664, paras. 2138-2139).

32. Two implementation mechanisms of IHL could prove especially useful: (a) the obligation to "respect and ensure respect for" the provisions of IHL, set forth in Art. I common to the four Geneva Conventions of 1949 and Protocol I of 1977; and (b) the International Fact-Finding Commission provided for in Art. 90 of Protocol I and set up on 25 June 1991 (on the Commission's role see Krill, Françoise, "The International Fact-Finding Commission", ICRC, No. 28 1, March-April 1991, pp. 190-207).

The prohibition of biological weapons
Current activities and future prospects

by Graham s. Pearson*

Contents

Introduction

Deliberately induced disease or biological warfare is a source of increasing concern as we approach the twenty-first century, as its prevention is central to the security, health and well-being of the global community. In the simplest terms, biological warfare means placing the health of humans, animals and plants at risk from disease deliberately induced as a hostile act. Disease has caused more casualties in all wars than actual weapons of war and there is increasing -and justified -worldwide concern about new and emerging diseases.[1] As the world population continues to increase, new areas of land are occupied and there is greater overcrowding in populated areas, with an ever-greater demand for both plants and animals as sources of food. This creates more opportunities for new or old diseases to spread among humans, animals and plants, with all the consequential socio-economic damage to the countries, concerned.

Awareness of the susceptibility of humans, animals and plants to disease is increasing. Headline reports of plague in India in September 1994 and of Ebola fever in Zaire in April 1995 show how the spread of disease can prompt widespread if not worldwide alarm and concern. A World Health Organization (WHO) team visited India in October 1994 and reported that there had been an outbreak of bubonic plague in the town of Beed some distance inland from Bombay, followed by an outbreak of pneumonic plague in the city of Surat on the coast some 250 km north of Bombay.[2] In the Ebola outbreak, WHO had reported

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[1] Laurie Garrett, *The coming plague: Newly emerging diseases in a world out of balance*, Farrar, Strauss and Giroux, New York, 1994.

[2] "India ponders the flaws exposed by plague...", Nature, No.372, 10 November 1994, p. 119. See also "India confirms identity of plague". *Nature*, No.373, 23 February 1995, p. 650.

93 cases and 86 deaths less than two months after the start of the outbreak, in similar pattern to the earlier 1976 outbreak in which 290 people died out of 318 infected -a 90% mortality rate.[3] Animals and plants are no less vulnerable. Livestock and crops can suffer devastating losses. In these times of universal air travel an infectious disease that breaks out in one country on one continent can all too readily reach countries on other continents, sometimes before the signs of the initial outbreak have been recognized. Outbreaks of disease can understandably lead to attempts to seal off areas and regions where they have occurred.

It is therefore hardly surprising that WHO chose to devote its 1996 World Health Report to the subject: "Fighting disease, fostering development".[4] In the foreword, WHO Director-General Hiroshi Nakajima not only says: "We stand on the threshold of a new era in which hundreds of millions of people will at last be safe from some of the world's most terrible diseases", but goes on to warn: "We also stand on the brink of a global crisis in infectious diseases. No country is safe from them. No country can any longer afford to ignore their threat". This worldwide concern about new and emerging diseases was expressed at the May 1995 World Health Assembly, which passed a resolution calling for "strategies enabling rapid national and international action to investigate and combat infectious disease outbreaks and epidemics".[5] The resolution recognized that new and re-emerging diseases are of growing national and international concern, as the speed and ease of air travel means that infected individuals can reach any other country within 24 hours, well before the symptoms of the disease become apparent. Similarly, a biological attack can be carried out covertly from far away, long before it is known that such an attack has occurred. And such attacks may be aimed at livestock and crops, resulting in major socio-economic damage.

The feasibility of biological warfare has been proven by all sorts of means short of actual use in war and has been demonstrated to a greater extent than had been the case for nuclear weapons before they were used on Hiroshima and Nagasaki. Although there is no proof that biological weapons have been used in war in recent years, it is evident that they were used by Japan against China in the 1930s.[6] It should be emphasized that the work carried out on biological weapons in the 1950s and 1960s is still valid today, and that advances in biotechnology over the last few decades have simply made such weapons easier to produce and use. When the United States decided to abandon its offensive biological warfare programme in 1969, it was widely perceived that such weapons were of marginal military utility even though research and development programmes in the United States and the United Kingdom had demonstrated the opposite. The reasons for this perception are unclear. The spread of disease in the environment is not questioned and tests have demonstrated the credibility of biological attacks. As for inadvertent attacks on one's own forces, this is only a matter of target selection and meteorological prediction, both of which have become significantly more reliable over recent decades.

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[3] "The hobbled horseman", *The Economist*, 20 May 1995, pp. 83-89, and "Disease fights back", *ibid*., pp. 15-16.
[4] *World Health Report 1996: Fighting disease, fostering development*, World Health Organization, Geneva, 1996.
[5] Forty-eighth World Health Assembly, Communicable diseases prevention and control: new, emerging and re-emerging infectious diseases. World Health Organization, Geneva, Resolution WHA 48.13, 12 May 1995.
[6] Sheldon H. Harris, *Factories of death: Japanese biological warfare 1932-45 and the American cover up*, Routledge, London and New York, 1994.

Many comparisons of the effects of biological, chemical and nuclear weapons have been made over the years;[7] all demonstrate that the effects of a biological attack are much greater than those of a chemical attack and are as great as if not greater than those resulting from a nuclear attack. That is why biological weapons are sometimes referred to as the poor man's atomic bomb; the costs associated with a biological weapons programme are so much lower - and are being reduced further by advances in microbiology and biotechnology -than those of a nuclear weapons programme. There is therefore a real risk that as the Chemical Weapons Convention makes chemical weapons far more difficult to acquire, and considering that the quantities needed are so much greater, biological weapons may come to be seen as an attractive alternative[8] and -their proliferation may become more of a problem, especially if action is not taken urgently to strengthen the Biological and Toxin Weapons Convention (BWC), which prohibits the development, production, acquisition and stockpiling of biological weapons.[9]

There is therefore no doubt in technical terms that biological warfare is a credible option. It is notable that although the UK, the US; and the former Soviet Union are the co-depositories of the Biological and Toxin Weapons Convention, President Yeltsin admitted in April 1992 that the Soviet Union/Russia had continued an offensive programme up to 1992. The fact that the Soviet Union continued such a programme for 20 years after signing the BWC clearly indicates that it saw biological warfare as a worthwhile capability. There is continuing concern on this count as the trilateral US/UK/Russian process agreed in 1992 continues with few public signs of progress.[10] The US Arms Control and Disarmament Agency Report submitted in July 1996 stated that "the progress has not resolved all US concerns".[11] It went on to say: "The United States; remains actively engaged in efforts to work with the Russian leadership to ensure complete termination of the illegal program and to pursue a number of measures to build confidence in Russian compliance with the: BWC". During the Gulf conflict of late 1990/early 1991 there was very real concern that Iraq might use biological weapons against the coalition forces; US and UK forces were vaccinated against the biological agents which were thought to be in Saddam Hussein's inventory (and which Iraq at last admitted holding to the UN Special Commission -UNSCOM -in 1995), and detection and identification capabilities were deployed. The coalition forces rightly regarded biological warfare as being a real threat. Subsequently, General Colin Powell, Chairman of the US Joint Chiefs of Staff said: "Of all the various weapons of mass destruction, biological weapons are

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[7] See, for example, Report of the Secretary-General, *Chemical and bacteriological (biological) weapons and the effects of their possible use*, N7575/Rev.l, S/9292/Rev.l, United Nations, New York, 1969; United States Congress, Office of Technology Assessment, *Proliferation of weapons of mass destruction: Assessing the risks*, OTA-ISC-559, S/N 052-003-01335-5, dated 5 August 1993. United States Congress, Office of Technology Assessment, Background Paper, *Technologies underlying weapons of mass destruction*, OTA-BP-ISC-115, S/N 052-003-01361-4, dated December 1993; Stephen Fetter, "Ballistic missiles and weapons of mass destruction: What is the threat? What shou1d be done?", *International Security*, No. 16/I, Summer 1991, p. 5; and Karl Lowe *et al*., *Potential values of a simple BW protective mask*, Institute for Defense Analyses, IDA P:lper P-3077, September 1995.

[8] Stephen Fetter, op. cit. (note 7).

[9] Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction, which opened for signature in 1972 and entered into force in 1975, Annex to UN General Assembly resolution 2826(XXVI), hereafter "Convention".

[10] Joint Statement on Biological Weapons by the Governments of the United Kingdom, the United States and the Russian Federation, 15 September 1992.

[11] United States Arms Control and Disarmament Agency, *Threat control through arms control*: Annual Report to Congress, Washington, DC, 1995 (issued 26 July 1996).

of the greatest concern to me".[12] Such a statement would only have been made if biological weapons were regarded as being a credible option.

The reality and danger of the Iraqi biological warfare capability has become apparent through the work of UNSCOM.[13] Over a five-year period, Iraq initiated and aggressively developed a biological weapons programme which, by the outbreak of the Gulf conflict in 1991, had resulted in the filling of over 160 aircraft bombs and 25 Al Hussein missile warheads with biological warfare agents and their deployment to four locations. In addition, Iraq has stated that authority to launch biological and chemical warheads was pre-delegated in the event that Baghdad was hit by nuclear weapons during the Gulf conflict. A wide range of agents including not only anthrax and botulinum toxin but also aflatoxin, ricin and viruses such as camel pox virus, as well as a plant agent, wheat cover smut, were studied and a sizeable fermentation capability was established for their production. It is also clear that Iraq was engaged in the design and development of longer-range missiles capable of carrying biological
warheads that could reach targets at distances of up to 3,000 km, thus bringing cities such as Paris and Bonn within range of attack from Baghdad. Iraq was thus potentially seeking the capability to pose much more than a regional threat.

There is therefore real and justified concern about the proliferation and potential acquisition of biological weapons in the changing world of the 1990s. President Clinton in his address to the UN on 27 Septe:mber 1993 said: "One of our most urgent priorities must be attacking the proliferation of weapons of mass destruction, whether they are nuclear, chemical or biological; and the ballistic missiles that can rain them down on populations hundreds of miles away. If we do not stem the proliferation of the world's deadliest weapons, no democracy can feel secure".[14] This continues to be a major concern. As John Deutch, US Director of Central Intelligence, testified in 1996: "Of the transnational issues, the proliferation of weapons of mass destruction and advanced conventional weapons systems pose the gravest threat to national security and world stability. At least 20 countries have or may be developing nuclear, chemical, *biological* weapons and ballistic missile systems to deliver them. *Biological weapons, often called the poor man's atomic bomb, are also on the rise*. Small less developed countries are often eager to acquire such weapons to compensate on the cheap for shortcomings in conventional arms" [emphasis added].[15] At the Fourth Review Conference of the BWC in Geneva in November 1996, David Davis, the UK Minister of State for Foreign Affairs, said: "Biological weapons have for 25 years remained something of a Cinderella in international efforts to control the spread of weapons of mass destruction (...) A general perception held that the biological weapons problem was solved; that it did not present a real risk or threat (...) But over the last decade, we have seen these comfortable assumptions overturned".[16] The danger of the possible use of chemical and biological materials for terrorist purposes was recognized by the Heads of the G7 States at

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[12] General Colin Powell, Chairman, Joint Chiefs of Staff,.House Armed Services Committee, 30 March 1993.
[13] United Nations Security Council, *Report of the Secretary-General on the status of the implementation of the Special Commission's plan for the ongoing monitoring and verification of Iraq's compliance with relevant parts of Section C of Security Council resolution 687 (1991)*, S/1995/864, New York, 11 October 1995.
[14] United Nations General Assembly, *Address by Mr William J. Clinton, President of the United States of America*, Forty-eighth Session, 4th Plenary Meeting, 27 September 1993, N48/PV.4, 4 October 1993.
[15] John Deutch, Director of Central Intelligence, *Worldwide threat assessment brief*, US Senate Select Committee on Intelligence, Statement for the record, 22 February 1996.
[16] David Davis, MP, Minister of State for Foreign and Commonwealth Affairs, Statement, Biological Weapons Convention Fourth Review Conference, 26 November 1996.

their meeting in Lyons, France, in their declaration on terrorism of 27 June 1996, which stated: "Special attention should be paid to the threat or utilization of nuclear, biological and chemical materials, as well as toxic substances, for terrorist purposes".[17]

The past decade has seen a move from the bipolar superpower stand-off of the Cold War era to a rash of regional conflicts around the world and the collapse of several economies. The deliberate spread of disease -among humans, animals or plants -may become to be regarded, especially by small States whose conventional military capabilities may be limited, as a possible option if we do not take action to make it unattractive. The window of opportunity to do this is now, with benefits not only for national, regional and international security but also for national and international prosperity and trade. We all need to focus on this growing problem and do what we can to make biologica1warfare a less attractive option. In this 25th year since the opening for signature of the BWC, it is particularly timely to give increased attention to the strengthening of the Convention, as significant developments have occurred in relation to the other two classes of weapons of mass destruction -nuclear and chemical weapons. Progress is being made to reduce -nuclear weapon stockpiles, and in April 1995 the Nuclear Non- Proliferation Treaty was extended indefinitely. The Chemical Weapons Convention opened for signature in 1993; thus far over 160 States have signed and over 85 States have lodged their instruments of ratification. The Convention entered into force on 29 April 1997.

The prohibition of biological weapons

The 1925 Geneva Protocol prohibits the use in war of biological (bacteriological) weapons. This instrument recognized that "the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials and devices, has been justly condemned by the general opinion of the civilized world" and that their use has been prohibited "in Treaties to which the majority of Powers of the World are Parties". It went on to say that "the High Contracting Parties, so far as they are not already Parties to Treaties prohibiting such use, accept this prohibition, *agreed 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" [emphasis added]. However, some signatories to the Geneva Protocol entered reservations which effectively reserved their right to retaliate in kind should biological weapons be used against them. During the last few years several States have given up their reservations;[18] the UK, for example, withdrew its reservation in respect of the 1925 Protocol in 1991.[19]

In 1972, the Biological and Toxin Weapons Convention prohibiting the development, production, acquisition and stockpiling of biological weapons opened for signature; it entered into force in 1975.[20] It had no provisions for verification of compliance. The basic prohibition is stated in Article I:

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[17] United Nations, Letter dated 5 July 1996 from the Permanent Representative of France to the United Nations, addressed to the Secretary-General, A/51/208, S/1996/543, 12 July 1996.

[18] See Nicholas A. Sims, “Article VIII: Geneva Protocol obligations”, in Graham S. Pearson and Malcolm R. Dando (eds), *Strengthening the Biological Weapons Convention: Key points for the Fourth Review Conference*, Quaker United Nations Office, Geneva, 1996.

[19] The Third Review Conference of the States Parties to the Convention..., Geneva, 9-27 September 1991, BWC/CONF.III/23, Geneva 1992. See p. 2 of BWC/CONF.III/SR.8 dated 1 October 1991, reproduced as p. 210 of BWC/CONF.III/23, Part VI.

[20] See note 9.

"Each State Party to this Convention undertakes never in any circumstances to develop, produce, stockpile or otherwise acquire or retain:

— Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;

— Weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict."

The BWC provides for Review Conferences to be held at about five-year intervals at which States Parties assess the operation of the Convention, taking into account any new scientific and technological developments relevant to the Convention; such Review Conferences have been held in 1980, 1986 and 1991, and most recently in November-December 1996. In their Final Declarations these Conferences have reaffirmed the basic prohibition laid down in the Convention and have confirmed that all developments in microbiology, biotechnology and genetic engineering are embraced by the Convention, thus reinforcing the international norm prohibiting biological weapons.

Strengthening the BWC: initial steps

Confidence-building measures

The need to strengthen the BWC was recognized at the 1986 and 1991 Review Conferences. A series of politically binding confidence-building measures (CBMs) was agreed in 1986; these were improved and extended in 1991. Under these States Parties undertake to exchange information annually on a range of subjects of relevance to the Convention. In 1986 four CBMs were agreed:[21]

— Exchange of data on research centres and laboratories;
— Exchange of information on outbreaks of infectious disease ;and similar outbreaks caused by toxins;
— Encouragement of publication of results and promotion of use of knowledge;
— Active promotion of contacts.

Under these measures information was to be provided by States Parties annually to the United Nations Department for Disarmament Affairs. At the Third Review Conference three (a, b and d above) of these four CBMs were amended and extended, and the fourth (c above) continued unchanged. Three new CBMs were added:

— Declaration of legislation, regulations and other measures,
— Declaration of past activities in offensive and/or defensive biological research and development programmes;
— Declaration of vaccine production facilities.

[21] The Second Review Conference of the States Parties to the Convention..., Geneva, 8-26 September 1986, BWC/CONF.II/13, Geneva, 1986.

A useful simplified proforma was introduced on which States Parties could indicate "Nothing to declare" or "Nothing new to declare", so as to encourage more of them to make the agreed annual declarations.

The number of States Parties which have made at least a single CBM declaration during the ten years since the first CBMs were agreed in 1986 reached 70 in 1995 and 75 up to 22 May 1996. Some 11 States Parties have made the agreed CBM declarations every year.

VEREX and the Ad Hoc Group

In addition, the Third Review Conference in 1991 set up an Ad Hoc Group of Governmental Experts (VEREX) to consider potential verification measures from a scientific and technical view point.[22] VEREX met four times., twice in 1992 and twice in 1993. Its final report in September 1993 identified and evaluated some 21 verification measures, both off-site and on-site, and concluded that "the potential verification measures as identified and evaluated could be useful in varying degrees in enhancing confidence, through enhanced transparency, that the States Parties were fulfilling their obligations under the BWC".[23] At the request of a majority of States Parties a Special Conference was held in 1994 to consider the VEREX report. This Special Conference mandated an Ad Hoc Group "to consider appropriate measures, including possible verification measures, and draft proposals to strengthen the Convention to be included, as appropriate, in a legally binding instrument, to be submitted for the consideration of States Parties".[24] The Ad Hoc Group was also required to "complete its work as soon as possible and submit its report, which shall be adopted by consensus...".

The Ad Hoc Group's mandate requires it, *inter alia*, to consider:

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— definitions of terms and objective criteria (...) where relevant for specific measures designed to strengthen the Convention;

— the incorporation of existing and further enhanced confidence building and transparency measures, as appropriate, into the regime;

— a system of measures to promote compliance with the Convention, including, as appropriate, measures identified, examined and evaluated in the VEREX Report;

— specific measures designed to ensure effective and full implementation of Article X [the promotion of microbiology for peaceful purposes]".

The mandate also requires that "measures should be formulated and implemented in a manner designed to protect sensitive commercial proprietary information and legitimate national security needs" and "to avoid any negative impact on scientific research, international cooperation and industrial development". Finally, the remit made it clear that "the regime would include, *inter alia*, potential verification measures, as well as agreed procedures and mechanisms for their efficient implementation and *measures for the investigation of alleged use*" [emphasis added].

[22] Third Review Conference of the States Parties to the Convention ---, Geneva, 9-27 September 1991, BWC/CONF-III/23, Geneva, 1992.
[23] Ad Hoc Group of Governmental Experts to Identify and Examine Potential Verification Measures from a Scientific and Technical Standpoint. Report BWC/CONF.III/ VEREX/9, Geneva, 1993
[24] Special Conference of the States Parties to the Convention Final Report, BWC/SPCONF/l, Geneva, 19-30 September 1994.

The Ad Hoc Group, under the chairmanship of Ambassador Toth of Hungary, held five meetings, three in 1995 and two in 1996, prior to the Fourth Review Conference of the BWC at the end of 1996.[25] Trustee further meetings are scheduled up to September 1997. The Group has thus far functioned by the appointment of four Friends of the Chair, who chair the sessions concerned with the four respective elements of the mandate. The Friends of the Chair have produced papers which reflect the discussions that have taken place, but which are without prejudice to the positions of -delegations on the issues under consideration in the Ad Hoc Group and do not imply agreement on the scope or content of the papers. These papers drawn up by the Friends of the Chair are considered by the Ad Hoc Group in plenary session and amended as requested by delegations so that they reflect the views expressed before being accepted for attachment to the procedural reports of the meetings.

Strengthening the BWC: future steps

The continuing importance of confidence-building measures

Although the Ad Hoc Group is addressing the incorporation of existing and further enhanced confidence building and transparency measures, as appropriate, into the regime destined to be the subject of a legally binding instrument to strengthen the Convention, it is evident that even once the Group has completed its work and such an instrument has been agreed and subsequently adopted there is likely to be a continuing role for some confidence-building measures in parallel with whatever measures are included in the instrument. Not all the existing politically binding confidence-building measures will be appropriate for incorporation in the legally binding instrument. Moreover, not all States Parties may choose to adopt the instrument at the earliest possible opportunity; in other words, for at least some time there is very likely to be a parallel regime: whereby some States will remain committed as they are at present to providing data and information under the current politically binding CBMs, and some States will be committed to providing data and information under the legally binding instrument.

Consequently, it is important to note that at the Fourth Review Conference the States Parties asserted in their Final Declaration that the Conference "welcomes the exchange of information carried out under the confidence-building measures, and notes that this has contributed to enhancing transparency and building confidence", and urged ";all States Parties to complete full and timely declarations in the future".[26]

The work of the Ad Hoc Group

In its September 1996 report the Ad Hoc Group informed the Fourth Review Conference that it had made "significant progress towards fulfilling the mandate (...) including by identifying

[25] For a detailed account of the work of the Ad Hoc Group, see Graharm S. Pearson, "Agenda Item 12, consideration of the work of the Ad Hoc Group established by the Special Conference in 1994", in Graham S. Pearson and Malcolm R. Dando (eds), *Strengthening the Biological Weapons Convention: Key points for the Fourth Review Conference,* Quaker United Nations Office, Geneva, 1996; and Graham S. Pearson, "Addendum to agenda item 12", in Graham S. Pearson and Malcolm R. Dando (eds), *Strengthening the Biological Weapons Convention: Key points for the Fourth Review Conference*, addendum to agenda item 12, Quaker United Nations Office, Geneva, 1996.

[26] The Fourth Review Conference of the States Parties to the Convention…...Geneva, 25 November-6 December 1996, BWC/CONF.IV/9, Geneva, 1996.

a preliminary framework and elaborating potential basic elements of a legally binding instrument to strengthen the Convention". Moreover, it had decided "to intensify its work with a view to completing it as soon as possible before the commencement of the Fifth Review Conference". The Fourth Review Conference later in 1996 commenced with two days of general debate in which 31 States Parties as well as the ICRC made statements. Some of these statements were delivered by ministers or other political representatives from countries including Bulgaria, Cuba, France, Germany, the UK and the US, and from the EU, reaffirming the importance of the BWC. The EU statement was noteworthy for the fact that it was made on behalf of 29 States. Without exception, every State which spoke in the general debate during the first two days of the Review Conference spoke: in favour of the Ad Hoc Group's work towards a legally binding instrument.[27] Although a number of delegations indicated the measures they, envisaged being incorporated in the future legally binding instrument and suggested completion by 1998, there was no consensus on including such language in the Final Declaration. However, the wording adopted enabled the Ad Hoc Group to move on to a new form of negotiation based on a rolling text.

The report of the Group' s March 1997 meeting[28] included an annex outlining "Possible structural elements of a protocol to the BWC:", which should form the basis for the establishment of a rolling text in order to achieve the transition to a negotiating format. It is hoped that the Group's future reports will contain an appendix comprising the rolling 1text available to date, always recognizing that nothing is agreed until everything is agreed. At the March meeting the Friends of the Chair further developed their papers, with the one on Compliance Measures providing four papers on declarations, investigations, other visits and procedures, and measures to strengthen the implementation of Article III; the one on Definitions providing four papers on definitions, human pathogens, a list of equipment and threshold quantities; and the one on Article X presenting a paper suggesting how measures contained in Article X might be incorporated -in a future instrument. These papers all include square brackets around parts of the text, a welcome initial move towards possible language for a legally binding instrument.

Definitions: An important point that has been discussed at some length by the Ad Hoc Group concerns precisely what the role of definitions might be in the legally binding instrument. It is clear from the Group' s mandate that definitions and objective criteria are required where relevant for specific measures to strengthen the Convention. It is also recognized that care needs to be taken to avoid any attempt to define terms used in the Convention, as this would result in a reinterpretation of the Convention itself and its scope. The Convention has stood the test of time, with successive Review Conferences -including the Fourth Review Conference -reaffirming in relation to the basic prohibition in Article I that the undertaking given by States Parties in that Article applies to all "relevant scientific and technological developments, *inter alia*, in the fields of microbiology, biotechnology, molecular biology, genetic engineering"; and that "the Convention unequivocally covers all microbial or other biological agents or toxins, naturally or artificially created or altered, as well as their components, whatever their origin or method of production".

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[27] For a detailed account of the Fourth Review Conference, see Malcolm R. Dando and Graham S. Pearson, "The Fourth Review Conference of the Biological and Toxin Weapons Convention: Issues, outcomes and unfinished business", *Politics and Life Sciences*, 16(1), 1-22 March 1997.
[28] Procedural Report of the Ad Hoc Group of the States parties to the Convention ... BWC/ADHOC GROUP/34, 27 March 1997.

Confidence-building measures: As the central structure of the legally binding instrument has yet to emerge clearly, it is difficult at this stage to identify which of the possible transparency and confidence-.building measures will be required for the future instrument.

Compliance measures: The papers drawn up by the Friends of the Chair have focused on what are likely to be the central elements of the future instrument: mandatory declarations and their triggers; investigations of non-compliance whether at facilities or in the field; other non-challenge visits; and measures to strengthen the implementation of Article III (the undertaking to do nothing to assist in proliferation of biological weapons).

Article X measures: The papers have shown a welcome trend towards concentrating on potential measures relevant to the BWC and away from those which would duplicate unnecessarily measures being taken by other fora, such as Agenda 21 and the Convention on Biological Diversity. There appears to be promise in measures that will implement Article X 279 of the BWC whilst at the same time improving transparency and building confidence.[29]

Towards a protocol: The identification of possible structural elements in the March 1997 meeting and the imminent move to a negotiating rolling text should help to focus the negotiations on specific measures; and procedures and so move towards problem-solving. As has already been said by several analysts, the basic measures needed to strengthen the BWC are already out there. Nothing new is needed; what is required is the tailoring of existing measures to meet the particular needs of the BWC. It must be recognized that a considerable number of valuable measures have been devised for the Chemical Weapons Convention - such as the procedures for the handling of confidential information by the Organisation for the Prohibition of Chemical Weapons -and these do not need to be reinvented for the strengthened BWC. However, all these existing measures need to be considered on their merits and adapted to meet the specific needs of the BWC.

Prospects for a stronger BWC

As we look forward to the 21st century, it can be predicted that the negotiations of the Ad Hoc Group will lead to a legally binding instrument, hopefully in 1998, which will establish a regime of measures designed to strengthen the BWC and thus to achieve enhanced national and international security. It is clear that such an instrument is feasible and should be widely acceptable. It will involve safeguards against the loss of commercial proprietary or legitimate national security information. Mandatory declarations will be a central and key element of a strengthened BWC. A short list of pathogens and toxins appears likely to be included, but only as a tool to facilitate a specific measure in the legally binding regime: such a list can in no way redefine or limit the scope of the prohibition contained in Article I of the BWC. No new measures are needed for such ii strengthened regime for the BWC; however, the States Parties need to be encouraged to demonstrate the political will to bring the work of the Ad Hoc Group to an early conclusion and then to adopt the legally binding instrument.

A Special Conference should be held in 1999 at which States Parties would open the legally binding instrument for signature and subsequent ratification. There is a clear need to bring this instrument into effect as soon as possible thereafter; consequently, the number of States needing to ratify it before it comes into force should be kept small. There will, however,

[29] Graham S. Pearson, "Environmental and security regimes for toxic chemicals and pathogens: A useful synergy", *Verification*, Westview Press, Boulder, 1 99i' (in press).

inevitably be a period of transition during which some States are party to the BWC and have ratified the new instrument, some have only signed the instrument and some have not signed it; there will also be States which have signed the BWC but still have to ratify it; and yet others who have not signed it. Once the legally binding instrument has been opened for signature, there is much to be said for a move to encourage universal adhesion to the BWC.

Confidence-building measures are likely to continue to be important, either as politically binding measures as at present, or as mandatory or voluntary elements of a new instrument. There is a strong argument in favour of giving whatever organization is set up to implement such an instrument the task of collecting the annual confidence-building declarations, and then collating them and distributing them to States Parties. Such an organization could encourage States Parties to provide timely declarations and provide assistance in completing them, to help promote transparency and build confidence.

Disease, whether occurring naturally or caused deliberately, is increasingly on the agenda of governments and industry worldwide. The health and well-being of the global community (humans, livestock and crops) are of direct importance for prosperity and trade. Efforts to combat disease, whatever its origin, are in the interests of all. A realistic and pragmatic approach is needed now to strengthen the BWC. As President Clinton has said: "Let us strengthen our determination to fight the rogue states, the terrorists, the criminals who menace our safety, our way of life and the potential of our children in the 21st century. Let us recommit ourselves to prevent them from acquiring weapons of mass destruction". The BWC can and should be strengthened as a matter of urgency.

THE REGULATION OF BIOLOGICAL AND CHEMICAL WEAPONS

H. McCoubrey

Contents

IN the modern arsenal of 'unconventional 'weapons biological and chemical weapons have sometimes seemed overshadowed in public debate by the question of nuclear armaments. In practice, however, such weapons, by reason of their effects, the relative ease of their manufacture and the greater extent of their proliferation may be argued to represent as great a peril. The legal status of biological and chemical weapons is clear enough. The first use of both is unequivocally unlawful. Manufacture and possession are also now proscribed, provision in respect of chemical weapons having finally been agreed in principle in 1992. Monitoring the efficacy of the ban against use is relatively easy in that in international hostilities violations can, *ex hypothesi*, hardly be concealed. Policing the ban against manufacture and possession is considerably more problematic, since in some cases the distinction between legitimate and illegitimate plants may not be immediately evident. Such difficulties can only be compounded where, as may commonly be the case, scrutiny is not welcome. The point was demonstrated clearly by the difficulties experienced by UN inspection teams in post-Gulf conflict Iraq even though the existence of relevant plants was ceI1ain and scrutiny was being undertaken in the immediate aftermath of military defeat. The record of efficacy, and otherwise, of weapons control, in relation to use as well as to manufacture and possession, rests inevitably upon a combination of juristic, military and political factors. These, for a variety of reasons, are displayed with unusual clarity in the context of biological and chemical weapons. Their operation in practice was demonstrated by the marked contrast between the 1980-88 Gulf War, in which chemical weapons were used, and the 1990-91 Gulf conflict, in which they were not; the reasons for this divergence lie in realities of implementation which the *jus in bello*, in particular, may never safely ignore. Analysis of the working of biological and chemical weapons regulation and the circumstances of its successes, and failures, is of self-evident importance in its immediate context and also for an understanding of the practical jurisprudence of general arms control.

I. THE DEVELOIPMENT AND STRUCTURE OF PROSCRIPTION

ALTHOUGH biological and chemical weapons have undeniably undergone massive technical development in the twentieth century, neither actually originated in that period. Choking and irritant smokes were used in warfare from ancient times and the use of sulphur fumes was considered, but rejected, during the Crimean War. In the Middle Ages the bodies of plague victims were on occasion catapulted into besieged cities with a view to disseminating the disease amongst the defenders in a primitive form of biological attack. The modem perception of this general category of warfare was, however, formed by the gas attacks of World War I. It may strongly be argue-d that the ancient customary ban upon 'poison weapons'[1] and the principle of 'unnecessary suffering' set out by the Declaration of St. Petersburg 1868 both suggest the unlawfulness of these means of warfare but express provision was in any case made by Hague Declaration II 1899, which was stated to build upon the general 'St. Petersburg' principle. The Declaration proscribes:

> the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases.

It also includes a general participation clause excluding its effect if 'one of the belligerents shall be joined by a non-contracting Power'. But, as Roberts and Gueilff point out:[2]

> To the extent that the specific prohibition embodied in 1899 Hague Declaration 2 may be considered a particular rule of customary international law, it would be applicable to all states...

The narrow limitation of the Declaration to 'projectiles' having the 'sole object' of gas diffusion is however curious and it is certainly questionable whether the cloud diffusions of World War I fell strictly within its scope. E. M. Spiers remarks that:[3]

> The Hague Declaration...had merely forbidden the 'use of projectiles' the sole object of which is the diffusion of asphyxiating gases, not the emission o f cloud gas. Germany might have disregarded the spirit of the declaration but had not contravened its wording.

The customary principle which the Declaration embodies is, however, much broader and this the gas attacks may well be said to have contravened. The unlawfulness of gas warfare was emphasised by Article 171 of the Treaty of Versailles 1919. The horror occasioned by chemical warfare during World War I made further provision inevitable. A ban was included in the Treaty of Washington on the Use of Submarines and Noxious Gases in Warfare 1922, but this convention never entered into force, primarily by reason of the impracticability of its constraints upon the naval use of submarines. Ultimately the Geneva Gas Protocol 1925 made more effective provision. It provides that:

> the use in war of asphyxiating, poisonous or other gases, and of all analogous liquids, materials or devices, has been justly condemned by...the civilised world; and...[its] prohibition...declared in Treaties...; [the High Contracting Parties]...accept this prohibition, [and] agree to extend [it to]...bacteriological methods of warfare...

It is noteworthy that the Protocol refers to the general proscriptions which Hague Declaration II 1899 itself reflected, rather than simply to the Declaration, since the chemical usages to which it refers are broader in nature. The 'extension, of the ban to bacteriological methods of

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[1] Debate is possible as to the meaning of 'poison' in this context and it is sometimes contended that the radiological effects of nuclear weapons may be caught by this ban. This may be an undue extension of the customary principle but there can be little doubt that both biological and chemical weapons would fall within its remit.

[2] A. Roberts and R. Guelff, *Documents on the Laws of War* (2nd edn, 1989), p.35.

[3] E.M. Spiers, *Chemical Warfare* (1986), p.17.

warfare[4] may also be considered to have been a specific application of the proscription of 'poison weapons'.

The 1925 provision is manifestly a basic use proscription, but complications arise from the fact tha:t a number of States, including the United Kingdom and the United States, entered reservations to the effect that the ban should become ineffective if an enemy or its allies act in violation of it. Such reservations effectively restrict the ban to first use of the proscribed weapons. In view of the broad use of this form of reservation, this level of restraint may be considered the minimum use prescription having the force of customary law. The reservation, in effect, of 'second use' raises, of course, the question of deterrence as a means of 'enforcement' and essentially enshrines a right akin to belligerent reprisal. Greenspan remarks that reprisals are:[5]

> illegitimate acts...not...indicating abandonment of the laws of war, but, on the contrary, to force compliance with [them]...

It may be argued that these reservations weaken the 1925 proscription but Greenspan's conclusion may, by analogy, be strongly contended to have considerable force in the present context. In practical terms this is, of course, a classical argument of 'deterrence' and this factor will be contended, indeed, to play an important role in some cases of use constraint. However, the 1992 draft Geneva Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and their Destruction (hereafter Chemical Weapons Convention) forbids their use 'under any circumstances' and forbids the making of reservations. The potential impact of this could be dramatic, although it would not, of course, preclude other severe, but non-chemical, responses to chemical attack.

Debate also arises upon the application of the 1925 ban to non-lethal weapons, a number of reservations having been entered with regard to 'tear gas' by reason of its use in municipal policing. In fact the Geneva Gas Protocol 1925 makes no reference to lethal effects; indeed the mustard gas (di-chlorethyl sulphide) rendered notorious by its use in World War I was generally very severely disabling rather than necessarily]lethal. In this context, a strict interpretation of the Protocol seems appropriate. The provision of Article 1(5) of the 1992 draft Chemical Weapons Convention "could prima facie confirm this ban in explicit form.

Proscription of the *use* of a banned weapon is, by definition, founded upon fear of, at the very least, potential possession of the relevant armaments. This fear, and therefore the primary importance of a ban on use, is reduced by effective restraint upon manufacture and possession. Unfortunately the implementation of such regulation involves considerably greater difficulties than does the observation of compliance with a use proscription. Quite apart from difficulties of scrutiny and verification, it must also be accepted that there are 'grey areas' in relation to manufacture and possession in relation to which legitimate and illegitimate activities may not alw1lys be easily distinguished.

Partly for these reasons, proscription of the manufacture and possession of biological and chemical weapons has taken much longer to achieve than the proscription against USA. An early reference is found in Article 171 of the Treaty of Versailles 1919, which forbade

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[4] In the present context the term is normally taken to be synonymous with 'biological' warfare, scientifically dubious as this may be.

[5] M. Greenspan, *The Modem Laws of Land Warfare* (1959), p.408.

manufacture and possession of chemical weapons by Weimar Germany. This, however, was so obviously a product of its very particular context that it may be dismissed as an historical irrelevance. Modern provision is found in the UN Convention on the Prohibition of the Development, Production and Stockpiling of Biological and Toxin Weapons and their Destruction 1972. The Convention prohibits the stockpiling of such agents and the means of their diffusion in hostilities and the international transfer of certain relevant biological agents. States party are required to destroy stocks of materials above a quantitative limit indicating military intent rather than use for prophylactic, protective or other legitimate purposes. Assistance is also required to be rendered to States certified by the UN Security Council to have suffered biological attack.

The substance of the Convention itself is largely unexceptionable, but as an instrument for practical regulation it is subject to a number of gross defects. An immediate issue is the quantification of 'hostile' stocks. As Jozef Goldblat remark[6]

> While the term 'prophylactic' encompasses medical activities...the term 'protective, covers the development of protective masks and clothing,...detection and warning devices, and decontamination equipment. Thus, research on and production of certain quantities of biological agents and toxins, over and above those needed to prevent diseases, may continute,...[and this] contains a riskof infringement...of the provisions of the Convention.

The room for dispute :in this context, even assuming both objectivity and clear quantification, is evident and goes beyond even the problem of quantitative judgment in assessing what is legitimately necessary for genuine prophylactic use. This leads to another, and yet more basic difficulty, that of the efficacy of inspection and verification. Article V of the 1972 Convention demands only co-operation and consultation in the resolution of difficulties and, as Detter de Lupis has commented: [7]

> It has been questioned whether 'clarification' of article V could ever be widened to include institutions to assess alleged violations or reciprocal on-site inspections.

A further agreement of 1986 for the initiation of UN action or intervention by specialised agencies can be considered to be, at most, of equivocal utility in the present context. Safe destruction of both biological and chemical weapons may also be both scientifically and politically problematic. Selection of sites for post-'Cold War' destruction has in a number of cases generated a powerful and understandable 'NIMBY' ('Not In My Back Yard') factor amongst residents living in proximity to such places.

Control of the manufacture and possession of chemical weapons has, for a variety of reasons -including problems of verification, proved difficult to achieve. However, after some 24 years of negotiation, agreement upon the draft Chemical Weapons Convention was finally reached in principle in June 1992.[8] Following approval by the UN General Assembly the Convention will, by Article XXI(l), enter into force 180 days after the deposit of the 65th instrument of ratification, the depository being, by Article XXlI, the Secretary General of the United

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[6] J. Goldblat, ' Arms Control Agreements and Humanitarian Laws of War', in Marek Thee (ed.), Arms and Disarmament: *SIPRI Findings* (1986), p.297 at p.305.
[7] I. Detter de Lupis, *The Law of War* (1987), p.220.
[8] *The Independent* (London), 23 June 1992.

Nations. At the time of writing it is anticipated that the Convention will enter into force within two years,[9] i.e. in -mid-1994.

The Convention is modelled to an extent upon the Biological Weapons Convention 1972 but incorporates an attempt to provide much more effective means of scrutiny and verification. The basic requirements are stated, under the heading General Obligations, by Article I(L), which forbids Parties 'under any circumstances'

(a) To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or to transfer, directly or indirectly, chemical weapons to anyone;
(b) To use chemical weapons;
(c) To engage in any miJlitary preparations to use chemical weapons;
(d) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Part:.., under this Convention.

Article 1(2)-(4) requires States Party to destroy chemical weapons stocks, any chemical weapons it has abandoned in the territory of another State Party and any' chemical weapons production facilities' located in places under its jurisdiction or control. Interestingly, Article 1(5) forbids the use of 'riot control agents' in warfare. These being defined by Article 11(7) as any not exempted by the Convention 'which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure'. Subject to the question of any reservations and their effects, this proscription would put an end to the 'tear gas ' controversy in relation to the Geneva Gas Protocol 1925. Exemptions are provided for innocent possession and use of toxic chemicals. Article VI(2) requires States Party to the Convention to take necessary steps to ensure that toxic chemicals and chemicals by or through which they are manufactured are only developed, acquired, transferred or used in places under their jurisdiction or control for pemitted purposes. Chemical agents are listed according to specifications set out by Schedules 1, 2 and 3, the most immediately significant characteristics for each group being that of their potential for legitimate use. Schedule 1 chemicals have 'little or no use for purposes not prohibited ', those in Schedule 2 are 'not produced in large quantities for purposes not prohibited', whilst those in the third Schedule 'may be produced in large commercial quantities for purposes not prohibited '.The first group includes Sarin, Tabun, VX and Mustard Gas; group 2 includes Arsenic Trichloride and Thiodiglycol, group 3 includes Phosgene, of World War I notoriety, and Hydrogen Cyanide. The restrictions placed upon each group vary according to the likelihood and extent of the legitimate use of the chemicals concerned in chemical industries or otherwise. The legitimate economic and technological development of chemical industries is expressly protected by the Convention.

It will be noticed immediately that the provision of the 1992 draft Convention includes use-proscription as well as bans upon manufacture and possession. The impact of the former, which is *prima facie* more strict than that stated by the Geneva Gas Protocol 1925, remains to be seen, but, interestingly, Article XXII provides that:

> The Articles of this Convention shall not be subject to reservations. The Annexes... shall not be subject to reservations incompatible with its object and purpose.

This would, if successful, preclude 'second' or responsive use as well as first use, in contrast to the effect of reservations upon the effects of the Geneva Gas Protocol 1925. The delicate

[9] *The Observer* (London), 28 June 1992, citing Ambassador Ritter von Wagner.

question of 'belligerent reprisals' might remain open to debate, although use-proscription in 'any circumstances' counsels against this also.

In practice, again, much will depend upon the efficacy of the primary thrust of the draft Convention in relation to manufacture and possession. With this in mind, the Convention]~rovides for the setting up of the [International] Organisation for the Prohibition of Chemical Weapons (IOPCW) based, by Article VIII(3), in The Hague. Detailed provision for the Organisation is made by Articles VIII and IX of the draft Convention. An executive council comprising 41 members drawn in specified ratios from different regions is set up for purposes of detailed policy implementation and reports back to a conference of the States Party. It will be assisted by a technical Secretariat and there will be a Director-General. The 'teeth' of the IOPCW lie in Article IX(8)-(25), which makes provision for on-site challenge inspections. By Article IX(8) any State Party may request the carrying out of such am inspection in any place under the jurisdiction or control of another State Party for the 'sole purpose of clarifying and resolving any question concerning possible non-compliance' with the Convention. Inspection must then be permitted and, by Article VIII(48), the IOPCW enjoys 'such privileges and immunities as are necessary for the exercise of its functions'. Inspection must be notified to the inspected Party not less than 72 hours prior to arrival of the inspection team at point of entry (Annex 2C(18), a time evidently believed to be insufficient for the: effective disguising or concealment of illegitimate plant or materials. In theory this is an effective structure of inspection; however, some of the difficulties likely to beset unwelcome IOPCW visitations have been illustrated by post-1991 UN authorised inspections in Iraq.

States are permitted by Article X of the draft Convention to continue research into anti-chemical protective measures and to receive external assistance therein, provided that annual reports are submitted to the Technical Secretariat of the IOPCW. Where chemical attacks occur or are feared, assistance may be requested by the victim State and provided pursuant to investigation by the Director-General of the IOPCW. Sanctions may also be imposed upon deviant States.

There remains, as ever " the question of response to serious violations, including actual chemical attacks. Article XII of the draft Convention provides for different levels of response according to the technicality or gravity of the breach in question. These comprise restriction of a State's rights under the Convention pending compliance upon the recommendation of the Executive Council of the IOPCW, 'collective measures' in accordance with international law by States Party or, in cases of especially grave breach, reference to the UN General Assembly and Security Council. In the latter situation at least, the measures adopted could clearly include armed force. The 'teeth' of the 1992 draft Convention obviously exceed those of its 1972 'biological' counterpart, but their effectiveness in practice must remain an open question.

With the conclusion of the Geneva Chemical Weapons Convention 1992, the proscription of the manufacture, possession and use of biological and chemical weapons becomes in principle complete. The practical working of regulation can, however, never be anticipated to be perfect and the patterns of compliance and non-compliance are vital to an understanding of the efficacy, and otherwise, of control.

II. PATTERNS OF COMPLIANCE AND VIOLATION

COMPLIANCE and non-compliance with positive legal norms, a function of the practical attachment of obligation(s) to the provisions in question, rest upon a variety of factors which include the formal authority of the system, the circumstances of maintenance and 'enforcement' and, on a different level, the extent of moral suasion. The formal status and moral claim of provision for biological and chemical weapons regulation are not seriously in doubt. The practical circumstances of implementation are, however, enormously variable and it is upon these practical pressures of warfare and the broader influences of international relations in the context of actual and potential armed conflicts that the efficacy of regulation rests. Since World War I the proscription of biological and chemical warfare has been recognised as a formal norm enshrining an international moral or ethical consensus which most States would claim to share. A State which, by its actions, rejects this consensus risks pariah status with all its implications for its conduct of international relations. Nonetheless, in some cases the consensus failed, although it must be remembered that these are very much the exceptional 'problem cases' rather than a common place of armed conflict.

The pattern which seems to emerge from post-1925 experience of biological and chemical warfare is both clear and disturbing. Such weapons have been *used* in either of two broad types of situation, either where 'conventional' action has reached stalemate an Id one belligerent is sufficiently ruthless, and desperate, to seek to break it in this way. This was essentially the case in World War I and more recently in the 1980-88 Gulf War. The more 'typical' case has, however, been the use of chemical weapons against technologically undeveloped opponents where, for whatever reasons, effective international response is thought unlikely. Granted the assumption that in such cases the generally accepted 'obligation' imposed by the *jus in bello* proscription has failed, the factor of 'deterrence' becomes at this point potentially important as a final bar to violation. The idea of deterrence rests jurisprudentially upon a 'Benthamite', sanctions-based element of the 'obligation' associated with law. Sanctions in the broad sense of an adverse consequence attached to non-compliance are obviously not in themselves a sufficient foundation of normative 'obligation', amounting in fact to simple compulsion. It may, however, be an important factor in securing compliance with norms and standards, which are otherwise established, in cases of wilful deviance. As Bentham himself put it: [10]

> with respect to the *force* of law: that is, with respect to the motives it relies upon for enabling it to produce the effects it aims at....We have seen that they are but the expectations of so many lots of pain and pleasure, as connected in a particular manner in the way of causality.

Bentham, and even more so his disciple Austin, emphasised coercive rather than 'alluring' sanctions of reward. They also denied the 'legal' status of public international law, generating thereby an extended but sterile academic debate which was in fact founded upon now redundant institutional perceptions. In the present context, granted the erratic and uncertain parameters of 'policing' and enforcement in relation to public international law, and perhaps especially the *jus in bello*, the attachment of what may be termed ad hoc adverse consequences to violation may well play larger part than would ideally be wished in the face of wilful violation, although the provisions of the draft Geneva Chemical Weapons

[10] Jeremy Bentham, *Of Laws in General*, ed. H.L.A. Hart, (Athlone edn. 1970), Chap.XI: 1, p.133.

Convention 1992 may, if effective, massively reduce the significance of the 'immediate response' factor.

The first 'modern' use of chemical warfare occurred in 1915. After early, and ineffective, use of non-lethal irritant gas on the western and eastern fronts,[11] on 22 April 1915 GeJ:many launched a chlorine gas attack upon French positions near Ypres and achieved an advance towards the town but did not take it. Apparently the High Command had not anticipated the impact of this form of attack and was unprepared to take advantage of their initial advance.[12] The primary motivation for this resort to chemical warfare was the desire to break the infantry stalemate which had rapidly developed on the western front. In this role, it was in fact a failure and a much more decisive role was played by the development of the tank. Nonetheless a considerable range of chemical agents, including phosgene and mustard gas, was used to varying extents by both sides in World War I. Chemical warfare caused horror and moral outrage during the War: evidenced, for example, in the war poetry of Wilfrid Owen; and on 6 February 1918 the International Committee of the Red Cross (ICRC) addressed an Appeal to the Belligerents denouncing gas warfare as 'criminal'.[13] This appeal was ineffective. After 1918 a somewhat ambivalent attitude was discernible. Valerie Adams refers to:[14]

> the moral urge to renounce a particularly horrific form of warfare, [and] the military concern to ensure that the ability to defend against gas and to retaliate in kind were retained...

The products were seen on the one hand in the use ban of the Geneva Gas Protocol 1925 but on the other hand in continuing research and development in biological and chemical military capacity. This raises, of course, the issue of use avoidance through deterrence, by reference to fear of retaliation, which played a fundamental role in military nuclear Policy during the 'Cold War' and post-1925 experience emphasises the point.

In the late 1930s both Axis and Allied Powers had considerable chemical weapons stocks. New chemical agents were being developed, including *Tabun* -a nerve gas developed by German scientists from commercial insecticides. Experiments were also being conducted with biological agents. Tests with an anthrax weapon were conducted by the UJ1ited Kingdom on the Hebridean island of Gruinard and at Penclwdd in South Wales in 1942.[15] Gruinard remained severely contaminated nearly 50 years after the experiments and even modern decontamination techniques present many difficulties. "During the 1930s Italy and Japan had in fact used chemical weapons against technologically disadvantaged opponents.[16] It is also possible that Japan may have used biological weapons against China during World War II[17] and there is considerable evidence that biological toxin experiments were conducted

[11] Specifically against the French at Neuve-Chapelle on 27 Oct. 1914 and against the Russians at Bolimow on 31 Jan. 1915. See E.M. Spiers, *op. cit. supra* n.3, p.15.
[12] E.M. Spiers, *idem*, p.16, citing the Chief of the General Staff, General Erich von Falkenhayn.
[13] See Stockholm International Peace Research Institute (SIPRI), *The Problem of Chemical and Biological Weapons*(6 vols., 1971-1975), Vol. IV, p.44; alsoV.Adams, *Chemical Warfare, Chemical Disarmament* (1989), p.168.
[14] V. Adams, *idem*, p.46.
[15] *Idem*, pp.II-12.
[16] See below.
[17] V. Adams, *idem*, p.ll, citing Arthur H. Westing, 'The Threat of Biological Warfare' (Nov. 1985) 35 (no.10) *Bio-Science* 627.

upon prisoners of war and Japanese dissidents.[18] Chemical warfare was not however employed in the European theatres of World War II and the reasons for this merit examination. Hitler was profoundly suspicious of gas warfare, having himself experienced such attacks in 1918 as a Corporal in a Bavarian infantry regiment,[19] and in this his fears for the morale effect upon his own troops and the obvious dangers of 'blow back' may have played a significant part. Nonetheless, as warfare was seriously considered in 1945 to counter Soviet advances into Germany in particular. In his memoirs the *Reichsminster* for Armaments, Albert Speer, states that:[20]

> Hitler...had always rejected gas warfare; but he hinted...that the use of gas might I stop the advance of the Soviet troops. He...[speculated] that the West would accept i gas warfare against the East because at this stage of the war...[they] had an interest ! in stopping the Russian advance.

In fact in an earlier broadcast, on 10 May 1942, Winston Churchill had stated that:[21]

> we shall treat the unprovoked use of poison gas against our Russian ally exactly as I if it were used against ourselves, and...carry gas warfare...[into] Germany.

Whatever Hitler himself may have thought at this point, Speer and the General Staff were sufficiently alarmed by the implications of resort to gas warfare to cut back on production of relevant material and no attacks were in fact made. Whether or not the 'Third Reich was technically a *Rechtsstaat*, and the matter is open to jurisprudential debate,[22] it manifestly had little concern for international legality where its perceived interests were at stake. It would in the circumstances seem a reasonable conclusion that pragmatic deterrence outweighed both formal obligation and moral suasion in averting chemical warfare in the closing days of world War II. It may be added parenthetically that the fact that the United States on the 'race' to develop nuclear weapons before any Axis Power did so enabled heir use in 1945 free from any question of 'deterrence'.

A somewhat parallel instance may be found in events in the Gulf in the 1980s and 1990s. The 1980-88, Iran/Iraq, Gulf War may be compared with World War I in a number of respects. As on the Western Front, an infantry stalemate developed and, in circumstances in which the military chemical capacity of Iran was unclear, Iraq made use of chemical weapons against Iranian positions. Sick Iranian soldiers supposed to have been victims of such attacks were flown for treatment to a number of foreign capitals, including London. This also served, of course, to publicise the use of these weapons and as a means of mobilising world opinion in response to a *jus in bello* violation the importance of such action should not be denied. On 23 March 1988 the ICRC, in striking parallel with its action almost exactly 70 years earlier, issued a statement calling, in carefully non-partisan language, for the abandonment of chemical warfare in the conflict.[23] Again, although such a statement, made ~,ith the considerable moral authority of the ICRC, serves a valuable purpose in emphasising a

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[18] *Ibid*., citing Peter McGill, 'DeadlyGenn War Secrets of Unit 731 " *Observer*, 11 Aug. 1985.
[19] E.M. Spiers, *op. cit supra* n.3, p.78, citing A. Hitler, *Mein Kampf* (1969), p.183. See also W. Moore, Gas Attack (1987), Chap.27.
[20] A. Speer, *Inside the Third Reich* (Sphere edn, 1971), pp.553-554.
[21] Quoted by E.M. Spiers, *idem*, at p.73.
[22] See H. McCoubrey, The *Development of Naturalist Legal Theory* (1987), pp.134-135.
[23] ICRC Press Release No.1547, 23 Mar. 1988. The UN Security Council unanimously condemned the use of chemical weapons in the Iran/Iraq War on 26 Aug. 1988. See Roberts and Guelff, *op. Cit*. *supra* n.2, p.138.

humanitarian obligation, it will not necessarily put an end to the violation immediately in question.

In marked contrast to the experience of the 1980s stands that of the 1990-91 Gulf conflict which followed the Iraqi invasion and occupation of Kuwait. The Coalition Powers preparing under UN authority to undertake military action for the liberation of Kuwait made extensive preparations for the receipt and treatment of chemical and possible biological casualties in the light of the experience of the 1980s.[24] It was feared that anthrax, cholera, typhoid or yellow fever toxins might be used in biological warfare and a programme of inoculation was commenced to counter this possibility, although stocks of vaccine were reported to be insufficient for full coverage.[25] Had the treatment of victims been necessary a further problem arises in the treatment and isolation of the highly contagious diseases involved. Geneva Convention I 1949 provides by Article 12:

> nor shall conditions exposing [the wounded and sick]...to contagion or infection be created.

Where persons protected 'by the Convention are present, the normal requirement of medical ethics for the adequate protection of patients from infection would be reinforced and would potentially present major practical difficulties. At the time doubts were expressed about the safe transfer to home medical institutions of such patients, and it was suggested that any British victims of biological attack might have to be treated at some suitable institution closer to the combat zone.[26] Fortunately neither biological nor chemical weapons were employed in the Gulf conflict. The reasons for this remain a matter for speculation, and may do so indefnitely, but a reasonable case may be advanced. The Baath regime in Iraq certainly possessed both biological and chemical weapons and had shown its willingness to use at least the latter in the 1980s.[27] The brutality of the occupation regime within Kuwait, the 'human shield' policy in relation to internees and the extensive use of environnl1ental methods of warfare all indicated a basic lack of concern with *jus in bello* constraints. In the military circumstances of 1991 it may be doubted whether the formal proscription of the Geneva Gas Protocol 1925 was a paramount consideration. It clearly was not so in the 1980s against an enemy of doubtful retaliatory capacity in a political context which seemed likely to mute international reaction. In the very different political circumstances of the 1990s these assumptions could not safely be made and there was a clear danger of effective retaliatory, although not ll1ecessarily biological or chemical, action.

The efficacy of deterrence, in that limited number of cases where wilful violation demands some coercive 'sanction', is, not unnaturally, highly variable according to the prevailing circumstances. The use of gas in World War I and in the 1980-1988 Gulf War may in a number of respects be considered to have been a tactic of desperation engendered by military stalemate. In the first case, simple inexperience with this t4Jrm of warfare tended to discount any element of 'deterence' and in the second poli1:ical and military circumstances significantly weakened its effect. Most cases of violation of the use proscription, however, show another side of the coin where practical deterrence is averted by the huge technical disparity of the belligerents.

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[24] The Independent (London), 11-12 Jan. 1991.
[25] *Idem*, 11 Jan. 1991.
[26] *Ibid.*
[27] See Ige F. Dekker and Harry H.C. Post, *The Gulf War of 1980-1988* (1992), pp.112-114.

All too many instances might be cited, but the best known are perhaps the 1935-36 Italo-Ethiopian War and the Sino-Japanese War from 1937 onwards, with, in a different political and legal context, the suppression of Kurdish dissent within Iraq in the 1980s;. The issue of gas use against technologically disadvantaged opponents surfaced early in the United Kingdom in relation to action on the Indian North West Frontier. E. M. Spiers comments that in 1919-20 :[28]

> When the British General Staff, strongly supported by Churchill, wished to use poison gas against the Afghan tribesmen, they met with vehement opposition from the authorities at home and in India...[T]he Secretary of State for India feared for the 'very serious political and moral' consequences of using gas...Although Brigadier-General Foulkes eventually converted [the Viceroy and the Commander-in-Chief in India]... the India Office remained firmly opposed...

Gas was not in fact used by the British in the Third Afghan War, despite Italian allegations made at the time of the Italo-Ethiopian war. The collision between some military opinion:, and it must be stressed that others were very much less than enthusiastic, and political and diplomatic opinion which feared the consequences of gas use even before the conclusion of the Geneva Gas Protocol 1925[29] was highly significant.

During the Italo-Ethiopian War, which resulted from Mussolini's desire for an African empire, gas warfare was used extensively. Denis Mack Smith remarks that: [30]

> victory is its own justification and...Mussolini was waiting for...a military victory ...[Marshal] Badoglio was authorised to employ terrorist methods at his discretion, including...the use of poison gas on a large scale....Mussolini...continued to regard it as a normal weapon of war as long as the fact of its use could be kept quiet; indeed he was also prepared to use...bacteria...

In practice gas was used to protect advancing Italian forces from flanking attack in the Ethiopian mountains, to disrupt supply columns and, on the battlefield, to contaminate areas to the rear of the enemy into which they could be driven by conventional fire.[31] Interestingly in the present context Mussolini attempted to conceal the use of gas, a comment upon the political as well as the legal and moral unacceptability of poison gas warfare. On 30 December 1945 the Emperor of Ethiopia, Haile Selassie, protested to the League of Nations about the gas attacks[32] and, after initial denials, Italy admitted the use of gas but claimed to have resorted thereto as a. belligerent reprisal for Ethiopian atrocities. The League established a Committee: of Enquiry but, granted the contempt with which the dictators of the 1930s viewed the League, this was of minimal effect.

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[28] E.M. Spiers, op. cit. supra n.3, p.37, citing a letter of Sir Edwin Montagu to Lord Chelmsford (the Viceroy) of 14 May 1919, Foulkes MSS J 62.
[29] British support for a gas ban in relation to the aborted Washington negotiations must however be considered to have been a potent factor.
[30] D.M. Smith, Mussolini (Granada edn, 1983), p.231, citing *Opera Omnia di Benilo Mussolini* 27/306 (28 Dec. 1936); 23/77 (15 Dec. 1927).
[31] E.M. Spiers, *idem*, p.91.
[32] V. Adams, *op. cit. supra* n.13, p.50, citing Anthony Eden, *Facing the Dictators*, p.322.

The use of gas in Ethiopia clearly combined the factors of unlikelihood of equivalent response together with action in a region relatively remote from the primary interests of the Powers of the day. It is true that Mussolini demanded a swift victory which Badoglio and his predecessor De Bono had been unable to deliver by conventional means, but this cannot be compared with the military situation on the Western Front in 1915 or in the 1980-88 Gulf War. The factors of action against a technologically disadvantaged opponent and relative unlikelihood of effective international response were repeated in the 1937-1945 Sino-Japanese War. The details of gas warfare during this conflict are difficult to ascertain with precision but, as E. M. Spiers remarks:[33]

> there was little doubt that gas in various forms had been used...In post-war testimony Japanese officers confirmed that their forces had used...irritant agents on the assumption that non-lethal gases were permitted under international law. But the...Chinese reports, coupled with photo graphic evidence and Testimony from...Red Cross Doctors and a CW observer from the 14th United States Air Force, strongly suggest that lethal agents were employed.

such a conclusion was supported by evidence of Japanese chemical warfare preparedness which became available at the conclusion of World War II.

It may be added that in both the Italo-Ethiopian War and the Sino-Japanese War a distinct element of racism can be seen in the use of gas warfare. Mussolini's contempt for the people of Ethiopia themselves was evident and in the intermittent warfare between Japan and China from the turn of the century to 1945 a more than usual element of brutality could be discerned, from the time of the *Kowshing* incident at the outset of the 1894-95 Sino- Japanese War onwards.[34]

It should, again, be emphasised that cases in which a raw deterrent factor arises are necessarily the exception rather than the role. If non-compliance was commonplace the use of proscription would, in fact if not immediately in theory, be put in serious doubt as a viable norm of public international law. The idea of deterrence does not in itself necessarily imply the use of either biological or chemical weapons as such. There are numerous other possible responses and this is important to bear in mind in the light of the possible effects of the preclusion of reservations to the draft Geneva Chemical Weapons Convention 1992 which seems to close off the 'back door' retention of a lawful 'second use' of chemical weapons.

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[33] E.M. Spiers, *idem*, p.9'9, citing, *inter alia*, 'Further Information on the Use of Gas by Japanese Troops in China', C.283, M.171, 1938 VII (6 Sept. 1938), League of Nations Archive R.3611.

[34] A number of other resorts to chemical warfare are suspected to have taken place: the use of potentially carcinogenic defoliants by US forces in the Vietnam War; gas attacks thought to have been perpetrated in Afghanistan, Cambodia and Angola. Dr Aubin Heyndrickz, who studied chemical warfare in Afghanistan, Cambodia and the Gulf on behalf of the UN, is reported to have concluded that Cuban forces employed n:1ustard gas and nerve gases of the Tabun and Sarin types in attacks upon Unita forces: *Daily Telegraph* (London), 10 Aug. 1988.

Much concern was expressed in the 1980s about the use of chemicals in attacks upon Kurdish villages in northern Iraq by Ba'ath Government forces. Kurdish refugees arriving in Turkey claimed that chemical attacks had been made upon the settlements of Sheikh- Bizeeni, Hammea and Chemi-Rezan between 11 and 15 Oct. 1988 and although these claims were strongly denied by attack subsequent journalistic investigation lent further credence to them: *The Independent* (London), 22 Sept. 1988; see also *The Guardian* (London), 19 Oct. 1988. Subsequently further convincing evidence was found by television journalists.

Although technically distinguishable from circumstances of international armed conflict, without for a moment conceding its legitimacy, this resort to chemical warfare again demonstrates many of the factors seen in other instances of such use in armed conflict.

III. POTENTTIALLY LAWFUL USE OF BIOLOGICAL OR CHEMICAL WEAPONS

THE point has been made above that although the prohibition stated by the Geneva Gas Protocol 1925 is absolute, the extent of reservations permitting use in response to violations by other belligerents can be argued to limit the ban now subsumed in customary law to *first use*. Such a reservation of responsive use is, as argued above, close to the claim of a right to reprisal. Frits Kalshoven remarks that:[35]

> Belligerent reprisals are taken by the injured Party and are aimed against the adverse Party responsible for the injury [and]...consist in a deliberate violation of a rule of the law of armed conflict...[finding] justification in the earlier wrongful conduct... and in...the purpose...to bring about a change of policy pursued by the adversary. ...There are...two certain drawbacks: belligerent reprisals tend to constitute an over-reaction to the original wrong, and they are likely to hit innocent people.

Clearly, the *second* use of biological or chemical weapons might fall within this category; even without reservation, however, this conclusion begs many questions. Both gas and chemical weapons tend towards indiscrimination in use. In the case of a gas cloud, for example, much will depend upon wind direction and once launched it is of course beyond control.

Additional Protocol I 1977 to the Geneva Conventions 1949 provides by Article 35(2) that:

> It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering.

This being of course a restatement of the general principle informing the Declaration of St. Petersburg 1868 and the requirement of the Land Warfare Regulations annexed to Hague Convention IV 1907, Article 23(e). Additional Protocol I 1977 also provides, by Article 52(2), that:

> Attacks shall be limited strictly to military objectives...

Which can again be found implicit in the general principle of the Declaration of St. Petersburg 1868. IN the context of civilians in armed conflict, Geneva Convention IV 1949 provides expressly by Article 33 *inter alia* that:

> Reprisals against protected persons and their property are prohibited.

Belligerent reprisals have an inevitably controversial status in the laws of armed conflict. As a 'self-help' remedy in cases where legal regulation has, *ex hypothesi*, failed to maintain a normative standard, they necessarily step beyond the 'normal' assumptions of the international legal system- even in the extreme case of armed conflict. Nonetheless their

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[35] Frits Kalshoven, *The Law of Warfare* (1973), p.111.

scope is not absolute: if it were so it might be argued, as a *reductio ad absurdum*, that any violation of the *jus in bello* cancels the obligation attached to the entire structure, leading to a 'nightmare' situation in which, so to speak, no holds are barred. Two basic forms of limitation can be contended to exist. In the first place it can be argued that:[36]

> what may usefully be termed the 'exception' of Belligerent Reprisal would surely not apply in the case of fundamental humanitarian norms which can be argued anyway not to be directly founded upon reciprocity *stricto sensu.*

It might in particular be contended that reprisals would not legitimately include violations which are specifically categorised as 'grave breaches' of the Geneva Conventions 1949 and the Additional Protocols 1977 thereto, which, it may be emphasised, include a number of 'Hague' elements. These specifically include, by Additional Protocol I 1977, Article 85(3)(b):

> launching an indiscriminate attack affecting the civilian population...in the knowledge that such attack will cause excessive loss of life, [or] injury to civilians...

This could clearly include some uses of biological or chemical weapons and it may readily be contended that such a use of weapons of this type would be unlawful under any relevant circumstances.

Where biological or chemical weapons have been used, or are threatened to be used, against military forces a case might, prior to the coming into effect of the draft Geneva Chemical Weapons Convention 1992, have been made out for reciprocal employment against the adverse belligerent force, granted the apparent state of the customary prohibition in the light of reservations to the Geneva Gas Protocol 1925. Even reprisals need not, however, inevitably be a simple 'tit for tat' repetition of the original violation. In the case of biological and chemical warfare, granted the apparent effects of 'deterrence' in extreme cases, it must again be emphasised that it does not follow that only directly paralleled reciprocal action would meet the case. The precise nature of the factors discouraging resort to chemical warfare by a State known to have both the requisite capacity and will in the 1990-91 Gulf conflict remain open to debate, but it may readily be contended that the clear implications of general military escalation may have played at least as great a role as the possibility of specific retaliation.

It may also be suggested that, granted the manifest illegality, even in the current state of customary law, of the first use of chemical and biological weapons, the possibility, however remote, of those responsible being ultimately held to account should not completely be discounted. F. B. Schick remarked dismissively that:[37]

> wars are planned in the hope of victory not in the fear of possible defeat. As long as schemes for effective world government remain...Utopias...criminal sanctions [as a means of maintaining the norms of the laws of armed conflict]...must be considered illusory.

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[36] H. McCoubrey, 'The Idea of War Crimes and Crimes against Peace since 1945' (Nottingham Univ. Centre for Int'l Defence Law Studies/Dept. of Law occasional Paper No.2, June 1992), p.27.
[37] F.B. Schick, 'lntemational Criminal Law -Facts and Il1usions' (1948) 11 MLR 290 at 299.

This view, although by no means devoid of pragmatic force, appears excessively pessimistic. As it has been suggested elsewhere:[38]

> However uncertain the processes may be the possibility [of enforcement] remains and this at least must act upon the minds of those who might commit or order the commission of war crimes.

IV. POLICING PROSCRIPTIONS UPON M.ANUF ACTURE AND POSSESSION

SUCCESSFUL proscription of the manufacture or possession of biological and chemical weapons would, *ex hypothesi*, preclude their use. The UN Convention on the Prohibition of the Development, Production and Stockpiling of Biological and Toxin Weapons and their Destruction 1972 and the draft Geneva Convention 1992 making equivalent provision for chemical weapons, agreed in principle in June of that year, go far to establishing such proscription. Even apart from the difficulties of distinction between legitimate, for example medical, and illegitimate possession of biological and chemical agents outlined above, the practical policing of this type of proscription may be severely problematic.

This was illustrated clearly by events following the conclusion of the 1990-91 Gulf Conflict. The ceasefire agreement included provision for UN inspection of Iraqi weapons of mass destruction and for their dismantling. These inspections took place in the immediate aftermath of military defeat although not in a context of occupation. To some extent the inspections were successful, but they faced from the outset considerable resistance. One of the more dangerous of these episodes ran from 5 to 27 July 1992, when UN inspectors wished to gain access to the Ministry of Agriculture building in Baghdad which was believed to contain documentation relating to the Iraqi weapons programme. Access was denied and in circumstances of rising tension a resumption of military action was seriously considered. Finally a compromise was reached under which Iraq agreed to allow in a UN inspection team excluding members from the Coalition of States which took part in the Gulf conflict itself. The Iraqi Ambassador to the United Nations, Mr Abdul Amir al-Anbari, stated that this met Iraqi requirements in respect of sovereignty and national security; the Head of the Special UN Commission in Iraq, Rolf Ekeus, denied that the arrangement involved any such concession.[39] After a delay of three weeks the inspection itself might perhaps appear to have been somewhat compromised in its effectiveness. Following this a further inspection in Iraq was stated to have found significant additional information but it was apparently not found necessary to challenge directly a renewed Iraqi 'ban' upon entry to Ministry buildings.

Such experiences demonstrate all too clearly the possibilities for obstruction of the vital process of on-site inspection even where, as in this case, the legal right of access is unequivocal and the presence of relevant weapons programmes is not in doubt. In more 'normal' circumstances it may reasonably be assumed that the work of a body such as the IOPCW, whose welcome in various States could be very limited, would not only encounter similar obstruction but would be much less certain of precisely what it was looking for. Such considerations are not, however, necessarily a counsel of despair. Even granted that perfect policing is highly unlikely" the proscriptions will constrain manufacture, possession and

[38] H. McCoubrey, *op. cit. supra* n. 36 p. 34
[39] *The Independent* (London), 27 July 1992.

transfer to a considerable degree and the 1992 Convention is, arguably, better constructed than its 1972 'biological' counterpart to this end. This, coupled with the potentially serious consequences of violation of the use-proscriptions, may be hoped, if not to eliminate, at least massively to curtail the threat posed by this 'unconventional' arsenal. For any States which remain determined to violate these proscriptions, the ultimate answer is found in the consequences of violating use proscriptions which have been considered above.

In this context, comment is finally demanded upon the claim sometimes made that biological and chemi,cal weapons are the 'poor man's nuclear weapons'. It being thus implied that their proscription, in contrast to the ambiguity of the law upon nuclear weapons, reflects the military interests of the technologically advanced nuclear powers. The argument was advanced by Iraq in Paris in 1989, in the course of the negotiation; which eventually led to agreement upon the Chemical Weapons Convention 1992. The Iraqi Foreign Minister, Mr Tariq Aziz, was reported to have argued that in a condition of vulnerable peace States must arm themselves in preparation and appeared to link the retention of chemical capacity with the issue of nuclear weapons.[40] This contention, despite its superficial plausibility, can be argued to be confused. Biological and chemical weapons can be manufactured and used by both 'rich' and 'poor' nations and the latter became a serious problem long before the military use of nuclear science was seriously considered. The *quid pro quo* suggested is much more apparent than real and it may readily be argued that the constraint of, *inter alia*, these weapons would be a benefit to the international community as a whole, both the developed and the developing worlds.

[40] *Idem*, 7 Jan. 1989.

The Biological Weapons Convention
An overview

by Jozef Goldblat[*]

Contents

Introduction

Since ancient times, the use in war of poison and pathogenic agents has been considered a treacherous practice. It was condemned by international declarations and treaties, notably by the 1907 Hague Convention (IV) respecting the laws and customs of war on land.[1] Efforts to strengthen this prohibition resulted in the conclusion, in 1925, of the Geneva Protocol which banned the use of asphyxiating, poisonous or other gases, usually referred to as chemical weapons, as well as the use of bacteriological methods of warfare. The latter are now understood to include not only bacteria, but also other biological agents, such as viruses or rickettsiae which were unknown at the time the Geneva Protocol was signed. (On 1 J anuary 1997, 132 States were party to this Protocol.) However, the Geneva Protocol did not prohibit the development, production and stockpiling of chemical and biological weapons. Attempts to achieve a complete ban were made in the 1930s in the framework of the League of Nations, but with no success.

Shortly after World War II, the United Nations called for the elimination of all weapons "adaptable to mass destruction".[2] Biological and chemical weapons were included in this category of arms along with atomic and radiological weapons.[3] Debates on their prohibition

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[1] For the text of this Convention, as well as the texts of the 1925 Geneva Protocol and the 1972 Biological Weapons Convention, which are discussed later in this article, see J. Goldblat, Arms control: A guide to negotiations and agreements, London, Thousand Oaks, New Delhi, PRIO and SAGE Publications, 1994, pp. 257, 277 and 370, or D. Schindler and J. Toman (ed), The laws of armed conflicts, 3rd ed., Martinus Nijhoff Publishers/Henry Dunant Institute, Dordrecht/Geneva, 1988.

[2] United Nations General Assembly Resolution No.1, 24 January 1946.

[3] As decided in 1948 by the UN Commission on Conventional Armaments, a subsidiary body of the UN Security Council (United Nations document S/C.3/32/Rev.1).

took place in the 1950s and 1960s in the context of proposals for general disarmament but, again, the debate remained inconclusive.

As a separate issue, the prohibition of chemical and biological weapons appeared on the agenda of the Eighteen-Nation Committee on Disarmament in 1968. One year later, the United Nations published an influential report on the problems of chemical and biological warfare,[4] and the question received special attention at the UN General Assembly. The UN report concluded that certain chemical and biological weapons cannot be confined in their effects in space and time and might have grave and irreversible consequences for man and nature. This would apply to both the attacking and the attacked nations. A report by the World Health Organization (WHO) on the health aspects of chemical and biological weapons, issued in 1970, stated that these weapons pose a special threat to civilians, and that the effects of their use are subject to a high degree of uncertainty and unpredictability.[5]

Although simultaneous prohibition of chemical and biological weapons had been considered for many years as both desirable and necessary, towards the end of the 1960s it became clear that such a prohibition was not achievable. In the Eighteen-Nation Committee on Disarmament, where the issue was under discussion, the United Kingdom and a few other Western countries adopted the view that biological weapons should be banned first. The Socialist and many neutral and non-aligned States were opposed to a separate treatment of these weapons, but finally accepted the Western approach. A factor which facilitated -this development was the unilateral renunciation of biological weapons by the United States, announced on 25 November 1969, and the decision by the US government to destroy its stockpile of these weapons, irrespective of a possible future international agreement.[6] On 14 February 1970, the United States also formally renounced the production, stockpiling and use of toxins for war purposes. It stated that military programmes for biological agents and toxins would be confined to research and development for defensive purposes.[7] Subsequent negotiations on a global prohibition of biological weapons led to an international agreement. On 16 December 1971, the text of the convention worked out by the Conference of the Committee on Disarmament (CCD), the successor of the Eighteen-Nation Committee on Disarmament, was commended by the UN General Assembly.[8]

A critical analysis of the BW Convention

On 10 April 1972, the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction was opened for signature. It entered into force on 26 March 1975, after the deposit of the instruments of ratification by 22 signatory governments, including the governments of the Soviet Union, the United Kingdom and the United States, designated as depositaries. By 1 January 1997, the BW Convention had been joined by 140 States, including all the permanent members of the United Nations Security Council.

Scope of the obligations

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[4] United Nations, *Chemical and bacteriological (biological) weapons and the effects of their possible use*, New York, 1969.
[5] World Health Organization, *Health aspects of the use of chemical and biological weapons*, Geneva. 1970.
[6] ACDA, *Documents on disarmament 1969*, Washington DC, 1970, pp. 592-93.
[7] Office of the White House Press Secretary, Press release, Washington DC, 14 February 1970.
[8] United Nations document A/2826(XXVI).

The BW Convention prohibits the development, production, stockpiling or acquisition by other means, or retention of microbial or other biological agents or toxins, as well as of weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict (Article I).

The Convention has not defined the prohibited items nor the targets to which the prohibitions relate. There exists, however, an authoritative definition of biological agents formulated by the WHO. In its 1970 report, mentioned above, the WHO described biological agents as those that depend for their effects on multiplication within the target organism and are intended for use in war to cause disease or death in man, animals or plants; they may be transmissible or non-transmissible. Toxins are poisonous products of organisms; unlike biological agents, they are inanimate and not capable of reproducing themselves. The Convention applies to all natural or artificially created toxins, "whatever their origin or method of -production" (Article I). It thus covers toxins produced biologically, as well as those produced by chemical synthesis. Since toxins are chemicals by nature, their inclusion in the BW Convention was a step towards the projected ban on chemical weapons.

Since the signing of the Convention, there have been no disputes among the parties regarding the definition of biological agents or toxins, but the lack of definition of "weapons, equipment or means of delivery" led to a controversy. In ratifying the BW Convention, Switzerland reserved the right to decide for itself which items fall within the definition of weapons, equipment or means of delivery designed to use biological agents or toxins. The United States entered an objection to this reservation, claiming that it would not be appropriate for States to reserve unilaterally the right to take such decisions. In its opinion, the prohibited items are those the design of which indicates that they could have no other use than that specified in the Convention, or that they were intended to be capable of the use specified.[9] There are, however, few weapons, equipment or means of delivery which would meet such criteria.

Under the BW Convention, the prohibition to develop, produce, stockpile or otherwise acquire or retain biological agents and toxins is not absolute. It applies only to types and to quantities that have no justification for prophylactic, protective or other peaceful purposes. Retention, production or acquisition by other means of certain quantities of biological agents and toxins may thus continue, and there may be testing in laboratories and even in the field. According to the clarification given in the course of the negotiations, the term "prophylactic" encompasses medical activities, such as diagnosis, therapy and immunization, whereas the term "protective" covers the development of protective masks and clothing, air and water filtration systems, detection and warning devices, and decontamination equipment, and must not be interpreted as permitting possession of biological agents and toxins for defence, retaliation or deterrence.[10] The term "other peaceful purposes" has remained unclear.One can assume that it includes scientific experimentation.

There are no provisions in the BW Convention restricting biological research activities. One reason for this omission may be that research aimed at developing agents for civilian purposes is difficult to distinguish from research serving military purposes, whether defensive or offensive. Moreover, in the biological field it is difficult to draw a dividing line -

[9] This interpretation was contained in the note of 18 August 1976 addressed by the US Secretary of State to the Swiss government.
[10] Disarmament Conference document CCD/PV. 542.

between research and development; a country can develop warfare agents in research facilities. Once developed, these agents can be rapidly produced in significant quantities. This circumstance and the express authorization to engage in production (for peaceful purposes) of biological agents and toxins that may be used in warfare create a risk that the provisions of the Convention will be circumvented. The stipulation that any development, production, stockpiling or retention of biological agents or toxins must be justified does not carry sufficient weight. There are no agreed standards or criteria for the quantities of agents or toxins that may be needed by different States for the different purposes recognized by the Convention. The parties are not even obliged to declare the types and amounts of agents or toxins they possess and the use they make of them. The system of material accountancy that is useful in the verification of certain measures of arms control is not practicable in the case of biological or toxin agents. It is thus not evident how much of a given prohibited substance stocked by a given country would constitute a violation of the Convention. The secrecy surrounding biological research activities and, in particular, the maintenance of defensive preparations, which at certain stages may be indistinguishable from offensive preparations, could generate suspicions leading to allegations of breaches.

A separate article of the Convention prohibits the transfer of agents, toxins, weapons, equipment or means of delivery, specified above, to "any recipient whatsoever", that is, to any State or group of States or international organizations, as well as sub-national groups or individuals. The provision of assistance, encouragement or inducement to acquire the banned weapons is likewise forbidden (Article ill). These non-proliferation clauses appear hard to reconcile with the commitment of the parties to engage in the "fullest possible" exchange of biological agents and toxins, and of equipment for the processing, use or production of such agents and toxins for peaceful ends (Article X). For all such materials and technologies, as well as expertise, are dual-use and as such widespread. To reduce the risk of misuse, an informal forum of industrialized countries, known as the Australia Group (after the country which took the initiative to convene it), decided to apply certain restrictions on transfers of items relevant to the BW Convention.[11]

Many nations consider the control arrangements adopted by the Group as complementary to the BW Convention, because an export may be precluded if there is particular concern about its potential diversion for weapon purposes. Other nations consider these arrangements to be discriminatory, because they chiefly affect the developing world. The latter would like to see the Australia Group disbanded and have all export restrictions that might be agreed among all parties incorporated in a legally binding verification document.

Parties to the BW Convention have undertaken to cooperate in the further development and application of scientific discoveries in the field of biology for the prevention of diseases or for other peaceful purposes (Article X). However, since the Convention is essentially a disarmament treaty, it can hardly serve as an effective instrument for such cooperation. The participants in the latest BW Convention Review Conference acknowledged the existence of an increasing gap between the developed and developing countries in the field of biotechnology, genetic engineering, microbiology and other related areas.[12]

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[11] The Australia Group was founded in 1985, in the aftermath of chemical weapons' use in the lran-Iraq war, to constrain the trade in the technologies and materials of chemical warfare. In 1990, its purview was expanded to include biological weapons.

[12] Fourth Review Conference of the Parties to the BW Convention, document BWCI CONF.IV/9.

The most remarkable feature of the BW Convention is the disarmament obligation of the parties: to destroy or divert to peaceful purposes all agents, toxins, weapons, equipment and means of delivery (Article II). The BW Convention was the first treaty providing for the abolition of an entire category of arms. The envisaged destruction or diversion was to take place not later than nine months after entry into force of the Convention, it being understood that for States acceding to the Convention after its entry into force the destruction or diversion was to be completed upon accession. All the necessary safety precautions are to be observed during the destruction operations to protect "populations" (that is, not only the population of the country carrying out these operations) as well as the environment in general. The United States was the only State to announce that its stockpile of biological and toxin agents and all associated munitions had been destroyed, except for small quantities for laboratory defensive research purposes. It also made it known that former biological warfare facilities had been converted to medical research centres.[13] No other State has made such an announcement. The United Kingdom said that it had no stocks of biological weapons.[14] The Soviet Union stated that it did not possess any biological agents or toxins, weapons, equipment or means of delivery, as prohibited by the Convention,[15] but this statement turned out to be untrue (see below).

Relationship with the 1925 Geneva Protocol

The BW Convention does not expressly prohibit the use of biological or toxin weapons. It only states that the obligations assumed under the 1925 Geneva Protocol, which prohibits such use, remain valid (Article VIII). However, adherents to the BW Convention are not necessarily parties to the Geneva Protocol. Moreover, the Convention stipulates that nothing in its provisions shall be interpreted as in any way limiting or detracting from the obligations assumed by States under the Geneva Protocol. This implies that the reservations to the Protocol, which form part of the obligations contracted by the parties, continue to exist. Insofar as the reservations concern the right to employ the banned weapons against non-parties or in retaliation against a party violating the Protocol, they are incompatible with the obligation of the parties to the Convention never "in any circumstances" to acquire biological weapons (Article I). They also contradict the parties' expressed determination to exclude "completely" the possibility of biological agents and toxins being used as weapons (ninth preambular paragraph). It is for this reason that, in acceding to the BW Convention in 1984, China declared that the absence of an explicit prohibition on the use of biological weapons was a defect which should be corrected "at an appropriate time". Indeed, over the years, a number of States have withdrawn their reservations to the Geneva Protocol, either with regard either to biological weapons alone, or to both biological and chemical weapons.[16] They have thereby recognized that since the retention and production of biological weapons are banned, so must, by implication, be their use, because use presupposes possession.

Nonetheless, in 1996, Iran proposed that the Convention (its title and Article I) be amended so as to make the ban on use explicit rather than implicit.[17] An amendment submitted by a party enters into force for each State accepting it upon its acceptance by a majority of the

[13] Disarmament Conference documents CCD/PV. 585 and 655.
[14] Disarmament Conference document CCD/PV. 659.
[15] Disarmament Conference document CCD/PV. 666.
[16] Ireland (1972), Barbados (1976), Australia (1986), New Zealand (1989), Czechoslovakia (1990), Mongolia (1990), Bulgaria (1991), Canada (1991), Chile (1991), Romania (1991), United Kingdom (1991), Spain (1992), Russia (1992), South Africa (1996), France (1996), Belgium (1997).
[17] Fourth Review Conference of the Parties to the BW Convention, document BWC/CONF.IV /COW /WP.2.

parties (Article XI). However, the Iranian proposal is opposed by many States which -fear the risks of having other provisions of the Convention opened up for renegotiation as well. Some are apprehensive that States not accepting the Iranian-proposed amendment would appear to condone the use of biological weapons under certain circumstances, and since use would be possible only after breaking the BW Convention, the absolute character of the Convention prohibitions would be called into question. What seems less objectionable than an amendment is a solemn declaration of understanding by all parties that the use of microbial or other biological agents or toxins in any way that is not consistent with prophylactic, protective or other peaceful purposes, would be a violation of the Convention.

Verification of compliance

No specific measures are set forth in the BW Convention to verify compliance with the obligation not to develop, produce, stockpile or otherwise acquire or retain biological agents or toxins for "hostile purposes". Indeed, hostile intentions, like any other intentions, cannot be verified. As mentioned above, the parties are not obliged to declare biological agents or toxins used in non-prohibited activities. Nor are they obliged to declare all laboratories engaged in research and development of substances that could be used as agents of warfare. This is a serious lacuna, because advances in biotechnology have made it possible to produce large quantities of potent toxic substances by a small number of people, in a short period of time, and in facilities which are difficult to identify. Such substances may be stored in inconspicuous repositories and eventually "weaponized", that is, filled into missiles, bombs or spray systems. Consequently, a violator could relatively easily break out from the Convention. What is even more incongruous, States joining the Convention are not required to declare the possession or non-possession of the banned weapons. Nor are States, which may have declared such possession, obligated to prove that they have destroyed the weapons or diverted them to peaceful purposes. The opening-up by the United States of some of its biological facilities for public inspection and international visitors, following the destruction of its stocks, was a voluntary act.[18]

National technical means of verification cannot be relied upon to verify in other countries the non-development and non-production of biological agents and toxins for hostile purposes, and there are at present no international means to perform such tasks. Illegal possession of the banned weapons could be demonstrated indirectly through investigations -which the UN Secretary-General is authorized to carry out in response to reports that may be brought to his attention on the possible use of chemical and biological or toxin weapons entailing a violation of the Geneva Protocol or of any other applicable rule of international treaty or customary law.[19] However, such investigations, which may be initiated by UN member States (but not by individuals or non-governmental organizations), could also prove inconclusive, because the diseases allegedly caused by biological weapons might be similar to those occurring naturally, and because it might be difficult for the investigators to determine the identity of the aggressor.

[18] US Congressional Record-Senate, 9 March 1971.
[19] United Nations Security Council Resolution 620 (1988). Guidelines and procedures for United Nations investigations were developed by a group of experts and endorsed by the United Nations General Assembly Resolution 45/57C(1990).

Each party is obliged to take measures, in accordance with its constitutional processes, to prohibit and prevent the activities banned by the Convention from taking place within its territory and under its jurisdiction or control anywhere (Article IV). The term "measures" applies to legislative, administrative or regulatory measures, whereas the term "under its jurisdiction or control" (also used in Article II referred to above) extends the bans to non-self -governing territories administered by States parties, and to territories under military occupation. " Anywhere" implies that even transnational corporations operating in the territories of non-parties to the Convention are covered by the prohibitions if they remain under the jurisdiction or control of the parties. Not all parties, however, have taken the steps required to ensure domestic compliance with the Convention.[20] This is all the more regrettable in that biological agents appear to be becoming attractive, for terrorist purposes, to players other than States. , According to reliable reports, the Aum Shinrikyo sect, which released nerve gas in a Tokyo subway train, had' also been working on the development of biological weapons and in 1995, shortly before the arrest of its leader, was close to completing this programme.[21]

On the international level, the parties have undertaken to consult one another and to cooperate in solving problems relating to the objective or the application of the provisions of the Convention. Such consultation and -cooperation may also take place "through appropriate international procedures within the framework of the United Nations and in accordance with its Charter" (Article V). Since the Convention does not explain what "appropriate international procedures" amount to, the participants in the BW Review Conferences agreed that such procedures should include the right of any party to request that a "consultative meeting", open to all parties, be convened promptly at expert level.[22]

The parties have the right to lodge with the UN Security Council complaints regarding breaches of the Convention. They have undertaken to cooperate in carrying out any investigation which the Security Council may initiate on the basis of the complaint received, and they are entitled to be informed of the results of such investigation. Each complaint must contain "all possible evidence" confirming its validity (Article VI). However, only a few States have the means to collect such evidence. Others may not be in a position to do so, and could not always count on obtaining relevant information from foreign sources, even from their allies. There is thus a possibility that, for political or other reasons (for example, unwillingness to disclose the nature or the source of the evidence), certain powers will deliberately overlook transgressions committed by some States to the detriment of others. A State which suspects a violation, but lacks reliable information and therefore does not possess sufficient evidence, may have its request for consideration rejected by the Security Council. Even if the Security Council agreed to discuss a charge which did not satisfy the above requirement, there would always be a danger that the case would not receive proper examination. For the Council is not entitled (or equipped) by the UN Charter to check compliance with arms control agreements; nor is it empowered to take action against

[20] Even before the BW Convention entered into force, France -not a signatory adopted a law (No.72-467 of 9 June 1972) prohibiting biological and toxin weapons on its territory. The wording of its main provisions is almost identical to that of the Convention. Severe punishment of violators by fines and imprisonment is provided for, and elaborate procedures are intended to ensure that the prohibitions are respected. France acceded to the Convention only in 1984.

[21] United States Senate Permanent Sub-Committee on Investigations, *Hearings on global proliferation of weapons of mass destruction*: A case study on Aum Shin rikyo, 31 October 1995.

[22] First and Second Biological Weapons Convention Review Conferences. Documents BWC/CONF.I/I0 and BWC/CONF.II/13.

violators of such agreements. Only when the Council finds that the situation created by the violation can lead to international friction may it recommend, under Chapter VI of the UN Charter, "appropriate procedures or methods of adjustment" to the State or States concerned. This may not always be the case.

In 1992, the President of the UN Security Council stated, on behalf of its members, that proliferation of weapons of mass destruction, which include biological weapons, would constitute a "threat to international peace and security", and that appropriate action would be taken to prevent it.[23] That action could include the application of coercive measures under -Chapter VII of the UN Charter. However, the statement of the President of the Security Council has no binding legal effect. Even if it were transformed into a formal decision of the Council to have such effect, it would not necessarily enable the Council to act in all pertinent instances. The power of veto possessed by the permanent members of the Council can always be used to protect violators of treaties, especially when the violator happens to be a great power. A suggestion, put forward during the BW negotiations, that the Security Council's permanent members should waive their right of veto at least with regard to resolutions concerning investigations of complaints, was not accepted. This is why proposals have been repeatedly made that a representative body of States parties -rather than the United Nations - should deal with investigations of alleged breaches of the BW Convention. If, in 1982, the UN General Assembly requested the UN Secretary-General to investigate alleged violations of the ban on use of chemical and biological weapons (see above), it did so primarily because the ban, as embodied in the 1925 Geneva Protocol, is widely considered to form part of international customary law to be observed by all States, parties and non-parties to relevant treaties alike.[24]

The circumstance that the fact-finding stage of the complaints procedure is not clearly separated from the stage of legal/political consideration and judgment is a serious shortcoming of the BW Convention. It makes it difficult to ascertain a violation. Moreover, a State under suspicion of having violated its obligations has no international impartial mechanism to turn to in order to free itself from that suspicion. Ill-considered allegations can therefore be made with impunity.

In the case of an established violation, parties would have to provide or support assistance, in accordance with the UN Charter, to a party which so requested, if the Security Council decided that this party had been exposed t9 danger as a result of the violation (Article VII). It appears from the negotiating history that assistance was meant primarily as action of a medical or other humanitarian or relief nature. In the understanding of at least the United Kingdom and the United States, it would be for each party to decide whether it could or was prepared to supply the requested aid.[25] In other words, assistance would be optional, not obligatory: it could be refused without incurring the charge of non-compliance.

The Convention provided for a review conference of the parties to be convened five years after its entry into force (Article XII). Later, the parties decided to meet at least every five

[23] United Nations Security Council document S/23500, 31 January 1992.
[24] See S. Sur, "La resolution.A/37/98 D du 13 decembre 1982 et les procedures d.enquete en cas d'usage allegue d'armes chimiques et bacteriologiques (biologiques)", *Annuaire franrais de droit international* (AFD1), 1984, pp. 93-109.
[25] Disarmament Conference documents CCD/PV. 542 and CCD/PV. 544.

years; these Conferences review the operation of the Convention, taking into account the relevant scientific and technological developments.

Allegations of non-compliance

Several allegations of non-compliance with the BW Convention have been made since the Convention entered into force.[26] Those which received most attention were the "Sverdlovsk" and "Yellow Rain" cases.

The Sverdlovsk case

In March 1980, the United States accused the Soviet Union of maintaining an offensive biological weapons programme which included production, weaponization and stockpiling of biological warfare agents. The accusation was based on the suspected airborne release of anthrax spores from a Soviet biological facility, which caused an outbreak of anthrax in the city of Sverdlovsk in April and May 1979.[27] The Soviet Union confirmed that there had been an outbreak of anthrax in the Sverdlovsk region, but attributed this occurrence to the sale of anthrax-contaminated meat in violation of veterinary regulations.[28] It provided little additional information. The issue was the subject of bilateral US/Soviet consultations, and various groups of scientists met to evaluate the Soviet account of the incident,[29] but the US government maintained its accusation.[30] In 1992, the Russian authorities admitted that a breach of the BW Convention had been committed. They undertook, under a decree issued by the President of the Russian Federation, to open -secret military research centres to international inspection and convert them to civilian use.[31]

The "Yellow Rain" case

In 1981, the US government accused the Soviet Union of being involved in the production, transfer and use of trichothecene mycotoxins in Laos, Kampuchea and Afghanistan in violation of both the 1925 Geneva Protocol and the BW Convention.[32] The allegation was

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[26] Descriptions of these allegations can be found in SIPRI Yearbooks. Allegations of use of biological means of warfare had also been made before the BW Convention entered into force.
[27] New York Times, 19 March 1980.
[28] First Biological Weapons Convention Review Conference document BWC/CONF.I/SR.12 para 29.
[29] For detailed descriptions of the case see M. Meselson, "The biological weapons convention and the Sverdlovsk anthrax outbreak of 1979", *Federation of American scientists public interest report.* Vol. 41 (7), Washington D.C.. September 1988; E. Harris, "Sverdlovsk and yellow rain: Two cases of Soviet noncompliance?", *International security*, Vol. 11(4), spring 1987, pp. 45-47; Ch. C. Flowerree, "Possible implications of the anthrax outbreak in Sverdlovsk on future verification of the Biological Weapons Convention: a U.S. perspective"; S.J. Lundin (ed), *Views on possible verification measures for the Biological Weapons Convention*, SIPRI, Oxford University Press, Oxford, 1991; V. Issraelyan, "Possible implications of the anthrax outbreak in Sverdlovsk on future verification of the Biological Weapons Convention: a Soviet perspective", *ibid*.
[30] The White House, *Report to the Congress on Soviet noncompliance with arms control agreements*, Washington D.C., 23 February 1990.
[31] *Chemical Weapons Convention Bulletin*, No.16, June 1992, pp.18-19.
[32] The allegation was in public for the first time by Secretary of State Haig in September 1981 (US Department of State, press release, 13 September 1981). More details were given in: US Department of State, *Chemical warfare in Southeast Asia and Afghanistan*, Special Report No.98, Report to the Congress from Secretary of State Alexander M. Haig, Jr., March 22, 1982; and US Department of State, *Chemical warfare in Southeast Asia and Afghanistan: An update*, Special Report No.104, by Secretary of State George P, Shultz, November 11, 1982.

categorically rejected by the Soviet Union. US charges were based on reports by alleged victims and eye-witnesses who stated that since the autumn of 1978 enemy aircraft had been spraying a toxic yellow material (hence the name of the case). Chemical analyses of samples of the yellow material and medical checks of the affected persons were conducted to substantiate the case. However, as the investigations proceeded, with the involvement of laboratories in different countries and a careful scrutiny of the eye-witnesses' reports, the reliability of the evidence was increasingly questioned.[33] Some authoritative scientists found that the yellow substance consisted to a large extent of excrements of wild honeybees, and extensive analytical efforts in several laboratories failed to confirm the initial positive reports of trichothecenes.[34]

Assessment

As compared to other arms control agreements, the negotiations for the BW Convention - conducted separately from those on chemical weapons with which they had been associated for decades –encountered few obstacles and were concluded relatively quickly, in a common taboo on use. The reasons were as follows.

Biological weapons are unpredictable in their effects and of limited value in combat.[35] Since cheating under a BW Convention could not yield significant military advantages to the cheating party, a ban on biological weapons without verification of compliance was considered by the negotiators to be free of serious security risks. By contrast, chemical weapons are predictable, capable of producing immediate effects and, consequently, useful in combat. Banning their possession without elaborate and intrusive methods of verification was, therefore, deemed impossible. Most states which joined the BW Convention did so on condition that the complete prohibition of biological weapons would be recognized as a step towards a complete prohibition of chemical weapons (Preamble and Article XI).

The aim of the BW Convention was not so much to remove an immediate peril, as to eliminate the possibility that scientific and technological advances, modifying the conditions of production, storage or use of biological weapons, would make these weapons militarily attractive. Indeed, progress in biotechnology is making it increasingly possible to "improve" upon known biological agents. Normally harmless organisms which do not cause diseases can be modified so as to become highly toxic and produce diseases for which there is no known treatment. But the Convention is comprehensive enough to cover all relevant scientific and technological developments, including biological agents and toxins that could result from genetic engineering processes.

The disclosure by the UN Special Commission of an extensive biological weapons programme in lraq,[36] as well as reports that certain other nations, too, have or are seeking to acquire a biological weapon capability,[37] indicate that the threat of biological warfare

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[33] A UN expert team, dispatched by the Secretary-General in 1981 and 1982, was not able to shed more light on the issue (UN documents N36/613 Annex and A/37/259).
[34] For an analysis of the Yellow Rain case, disputing the allegations, see J. Po Robinson, J. Guillemin, Mo Meselson, "Yellow rain in Southeast Asia: The story collapses", S, Wright (ed*), Preventing a biological arms race*, MIT Press, Cambridge Mass., 1990,
[35] They might, perhaps, be militarily more useful for area denial.
[36] United Nations Security Council document S/1995/864.
[37] Statement by the Director of the US Arms Control and Disarmament Agency to the BW Convention Review Conference, 26 November 1996.

remains real. Since the BW Convention has no instruments to check compliance, there is a need for verification machinery to deter would-be violators. Negotiations for a verification protocol, or another legally binding document strengthening -the Convention with measures of control, have been going on in an *ad hoc* group of States, open to all parties, since January 1995. So far, however, agreement has proved elusive. Until it is reached, parties to the Convention are expected to implement the confidence-building measures they have agreed at their Review Conferences. The most important among them are measures enhancing the transparency of activities involving biological agents and toxins. They include exchanges of information on facilities and research programmes relevant to the Convention, on vaccine production, and on significant and unusual outbreaks of diseases.

Eventually, to make possible a differentiation between treaty prohibited and treaty-permitted activities, the objects of the prohibitions will have to be more clearly defined, and the criteria necessary to assess compliance will have to be unambiguously established. Moreover, apart from short-notice visits to declared sites, on-site inspections of undeclared sites will have to be accepted without reservation by all parties. It is, of course, understood that sensitive commercial proprietary information and national security information, not directly related to the BW Convention, must be reliably protected. A special organization will be needed to oversee the implementation of the parties' obligations.

New Protocol on Blinding Laser Weapons

by Louise Doswald-Beck

Contents

Introduction

On 13 October 1995, the first Review Conference of the 1980 Convention on Certain Conventional Weapons[1] (CCW) adopted during its first session in Vienna[2] a new fourth Protocol entitled "Protocol on Blinding Laser Weapons".[3] The 1980 Convention comprises a framework Convention (containing technical provisions such as applicability, entry into force and amendment) and annexed Protocols containing the substantive rules relating to certain weapons.[4] Although many weapons had been discussed during the preparatory stages of this

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[1] Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May be Seemed to be Excessively Injurious or to Have Indiscriminate Effects, adopted on 10 October 1980 and opened for signature on 10 April 1981. For the text of the Convention, see *International Review of the Red Cross (IRRC)*, No.220, January-February 1981, p. 41.
[2] Held from 25 September to 13 October 1995. Subsequent sessions of the Review Conference, which concentrated on the problem of anti-personnel landmines and the possible amendment of Protocol II, were held in Geneva from 15 to 19 January and from 22 April to 3 May 1996.
[3] CCW/CONF.1/7. The text of the Protocol is annexed to this article.
[4] For greater detail on THC Convention and its Protocols, see IRRC, No.279, November-December 1990, pp. 469-577.

Convention, only three Protocols were adopted in 1980.[5] However, the structure chosen enabled new Protocols to be added in order to accommodate future weapons which needed to be prohibited or otherwise regulated.

The International Committee of the Red Cross (ICRC) was particularly active in the development of the new fourth Protocol. This article outlines the work that the ICRC undertook in order to establish the facts as regards the likely effects of new blinding laser weapons and how the ICRC sought the necessary international support[6] for a new Protocol on these weapons. It then describes the *travaux preparatoires* for the Protocol, namely the discussions during the Review Conference process that led to the wording of each Article of the new Protocol.[7] Finally it comments on the Protocol's likely influence in banning blinding as a method of warfare.

Putting blinding laser weapons on the international agenda

Twenty-fifth International Conference of the Red Cross

The ICRC's attention was first drawn to this issue during the 25th International Conference of the Red Cross held in 1986. The governments of Sweden and Switzerland submitted a draft resolution which would have pronounced the anti-personnel use of laser weapons to be illegal because they would cause unnecessary suffering or superfluous injury.[8] This wording was not accepted because of opposition from a few States interested in such weapons; there was little discussion because the vast majority of States were unaware of developments and thought that such weapons were science-fiction.[9] In the end the resolution simply appealed to governments to exercise care not to violate standards in international humanitarian law in the development of new weapons.[10] Subsequently, the government of Sweden raised the issue at the First Committee of the forty-first and the forty-second sessions of the United Nations General Assembly,[11] proposing a prohibition of the anti-personnel use of laser weapons

[5] Protocol I on Non-Detectable Fragments; Protocol II on Prohibitions or Restrictions on the Use of Mines, Booby Traps and Other Devices: Protocol III on Prohibitions or Restrictions on the Use of Incendiary Weapons.

[6] Including the support of persons and institutions which helped influence governments

[7] A number of facts stated in this article are based on the experience of the author during the negotiating process. At the time of writing there are no comprehensive official records of the *travaux preparatoires* for Protocol IV of the CCW.

[8] The draft resolution in its section B, operative paragraph 4, "notes that the development of laser technology for military use includes a risk that laser equipment of armed forces can be specifically used for anti-personnel purposes on the battlefield, such as causing pen11anent blindness of human beings, and that such use may be considered already prohibited under existing international law". Doc. CI/2.6/PR3, Commission I, Item 2.6.

[9] The possible use of lasers in outer space in the context of the Strategic Defense Initiative was generally known, but not developments for battlefield anti-personnel use.

[10] Resolution VII, paras. 6 and 7, read as follows: "notes that some governments have voiced their concern about the developments of new weapons technologies the use of which, in certain circumstances, could be prohibited under existing international law; appeals to governments, with a view to meeting the standards laid down in international humanitarian law, to coordinate their efforts to clarify the law in these fields and exercise the utmost care in the development of new weapons technologies", *IRRC*, No.255, November-December 1986, p. 350.

[11] Verbatim record of the thirty-third session of the First Committee, UN Doc. A/C.l/41/PV.33 of 21 November 1986, and of the thirty-fourth meeting, UN Doc. A/C.l/42/PV.34 of 9 November 1987. Sweden's statement at the thirty-fourth session of the First Committee of the General Assembly was as follows: "There seems to be a risk of developing lasers for anti-personnel lasers for anti-personnel purposes on the conventional battlefield. It is already technically possible to develop and manufacture specific anti-personnel laser weapons, the main effect of which would be to blind the adversary's soldiers permanently. It can be argued that methods of warfare which are intended and may be expected to cause irreversible injury to the human eye are already prohibited

which met with the same indifference as the original proposal before the 25th International Conference of the Red Cross and probably for the same reasons.

Expert meetings convened by the ICRC

After the 25th International Conference the ICRC began to look out for articles in specialized literature to see if there was a development of anti-personnel laser weapons intended to blind. As this indeed seemed to be the case,[12] it decided to hold a meeting of experts in 1989[13] to establish whether such weapons were likely to be manufactured on any scale, whether they would indeed blind in most cases of anti-personnel use, whether such use would already be a violation of international humanitarian law and whether a legal regulation was possible or desirable. This meeting turned out to be the first of four as the participants in this meeting recommended that these issues be investigated further.[14] The second meeting[15] undertook a detailed study of the technical and medical aspects of the use of battlefield laser weapons. The third[16] reviewed statistics of injuries suffered in battle, analysed the functional and psychological effects of different types of disabilities and assessed the particular problems that battle-induced blindness was likely to cause. This third meeting was considered necessary because States which were against any regulation of battlefield laser weapons armed that it was better to be blinded than killed and that blindness was no worse than other injuries likely to be sustained on the battlefield.[17] The last meeting in April 1991[18] discussed, on the basis of the material gathered in the previous two meetings, whether the anti-personnel use of laser weapons to blind would be already against the law, in particular the rule prohibiting the use of weapons of a nature to cause unnecessary suffering or superfluous injury, and whether for policy reasons it would be appropriate to have a treaty regulation of such weapons. Although there was a division of opinions as to whether such a use of lasers would already be illegal, the vast majority of participants were of the opinion that a specific legal regulation would be advisable and suggested an additional Protocol to the 1980 CCW as being the most sensible course to follow.

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under existing principles of humanitarian law. These principles should be laid down in an international instrument in order effectively to prevent such methods of warfare. There is therefore a need to elaborate a prohibition on the use of battlefield laser weapons specifically designed for anti-personnel use. On the other hand, it is evident that anti-materiellaser weapons would not, as such, violate international standards, even if they were to have secondary anti-personnel effects". In 1987, Sweden distributed a paper on this issue entitled *Battefield laser weapons and the question of anti-personnel use of such weapons*; on file with the author.

[12] There were several articles to this effect. e.g. in The Army, August 1985; Infantry, March-April 1987; *Military Review*, May 1987; Defense News, October 1987.

[13] First Round Table of Experts, 19-21 June 1989, which brought together technical and military experts in laser weapons, ophthalmologists, psychologists specialized in the effects of blindness and specialists in international humanitarian law.

[14] A short summary of the findings of the four meetings is to be found in *IRRC*, No.299, March-April 1994, pp. 150-153.

[15] First working group of experts (31 May-1 June 1990), which comprised highly specialized experts in lasers and their effects on the eye. See the report *Blinding Weapons: reports of the meetings of experts convened by the International Committee of the Red Cross on Battlefield Laser Weapons* 1989-1991, hereinafter Blinding Weapons: reports, ICRC (L. Doswald-Beck, ed.), Geneva, 1993.

[16] Second working group of experts (5-7 November 1990), which comprised doctors, surgeons and psychiatrists with experience with different types of war injuries and disabilities, *ibid*., pp. 175-317.

[17] See, for example, the position of the US Judge Advocate General ill "Memorandum of Law: The Use of Lasers as Antipersonnel Weapons", *The Army Lawyer*, November 1988, p. 4. Reproduced in ibid., pp.367,.371.

[18] Second Round Table of Experts, 9-11 April 1991, which was attended in a personal capacity by 37 government officials from 22 countries and six of the scientists who had participated in the previous working group meetings. See *ibid*, pp. 319-366.

The 26th International Conference of the Red Cross and Red Crescent was due to take place just a few months after this meeting,[19] and as at the time there was no knowing whether there would be a review conference of the 1980 CCW in the near future,[20] the ICRC decided to submit the question to the 26th International Conference,[21] together with a draft resolution which would have outlawed blinding as a method of warfare[22]. As the Conference was suspended,[23] the proposed resolution was neither negotiated nor adopted. However, some initial discussions showed that a few States were very reticent to adopt such a resolution, and it was clear that despite the recommendations made by the majority of participants at the fourth meeting of experts a formal decision by governments was going to be difficult to achieve. This was not only because of objections by the few governments that were actively interested in using anti-personnel laser weapons, but also because of the general indifference of many other governments that were not interested in a potential problem the urgency of which had not been proved. Linked to this was a general unwillingness to add to existing humanitarian law treaties as a matter of principle.

Another not inconsiderable problem was the scepticism the ICRC frequently encountered as to the pertinence and real application of the role prohibiting the use of weapons causing unnecessary suffering. Quite apart from the difficulty of defining this notion and applying it to a particular weapon, many government officials had difficulty in accepting the idea that there were limits on the damage that could be inflicted on soldiers during actual hostilities, although the need to protect civilians as much as possible from the effects of weapons was readily accepted in principle. The fact that lasers are not indiscriminate in nature and that the blinding lasers in question would not inflict death created a particular difficulty in this regard.[24]

However, the meetings of experts had given the ICRC sufficient information as to the horrific effects of blinding laser weapons both on their victims and on society and the fact that such systems, being small arms, would be likely to proliferate widely; it accordingly felt that it could mobilize sufficient international support for a legal regulation.

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[19] The fourth meeting of experts was held in April 1991 and the 26th International Conference was due to take place in Budapest in November-December 1991.

[20] The CCW Convention does not provide for automatic review (Article 8 of the framework Convention).

[21] Document drawn up by the ICRC for the 26th International Conference of the Red Cross and Red Crescent (1991) and entitled *Prohibitions or Restrictions on the Use of Certain Weapons and Methods in Armed Conflicts: Developments in Relation to Certain Conventional Weapons and New Weapons Technologies*, Doc. C.1/6.3.2/I, pp. 6-18. Several of the experts attending the fourth expert meeting also suggested submitting the question to this Conference.

[22] Doc. C.1/6.3.2/Res.l. The draft, dated 1 November 1991, was circulated to all States prior to the intended conference for comment. The operative paragraphs read as follows: "1. condemns blinding as a method of warfare; 2. *considers unacceptable* the use of weapons against persons with the sole or principal intention of damaging their eyesight; 3. *urges* States not to produce weapons to be used for this purpose; 4. *urges* particular care in the use of weapons systems that are dangerous for eyesight so as to avoid as far as possible accidental blinding".

[23] It finally took place in Geneva in December 1995.

[24] On the difficulty of achieving a specific regulation of new weapons, see comments in ICRC document, op. cit. (note 21), pp. 4-5, and also L. Doswald-Beck, "Obstacles to regulating new weaponry: battlefield laser weapons", in H. Fox and M. Meyer (eds.), *Effecting Compliance, Armed Conflict and the New Law*, Vol. II, The British Institute of International and Comparative Law, London, 1993, p. 107.

The ICRC therefore decided to publish in one volume the full findings of the four meetings of experts it had convened;[25] this was sent to all States and its publication was announced to the press.[26] The ICRC also continued to keep up with any developments published in unclassified literature, which confirmed the continued research into and development of these weapons but, significantly, played down the permanent blinding effects of these weapons.[27]

Preparation of the Review Conference of the CCW: the meetings of the Group of Governmental Experts

ICRC activity encouraging a new Protocol began in earnest when it became clear that there would be a review conference of the CCW. In February 1993 the government of France requested such a conference[28] and in December of the same year, 29 States Parties signed a letter to the same effect,[29] at the same time recommending the preparation of the conference by a Group of Governmental Experts. It should be stressed here that the purpose of the Review Conference was to amend Protocol II on landmines because of the outcry by a number of non-governmental organizations and some political leaders about the effects of anti- personnel landmines.[30] Both the letter sent to the UN Secretary-General and the General Assembly resolution[31] made this clear, and it was only as a result of persistent and intensive pressure by the government of Sweden that a possibility for adopting a new protocol was provided for in these documents.[32] However, most governments were reluctant to negotiate a treaty on a new weapon and stressed the importance of not diverting attention away from negotiations to amend the landmines Protocol.

Four meetings of the Group of Governmental Experts were held to prepare the Review Conference,[33] and it was only during the third that a session was allotted to discussing possible new protocols to the Convention. Two written proposals on laser weapons, one by

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[25] *Blinding Weapons*: reports.

[26] "Blinding Weapons", *ICRC News,* 10 February 1994.

[27] These developments tended to mention only the flashblinding or dazzling effects of the weapons when used against personnel, without mentioning the fold that any laser that temporarily blinds at a certain distance will inevitably blind at a closer distance. See, for example, articles in *International Defense Review* 1992; *Defence*, Apri11993; *Defense Electronics*, February 1993; Laser Focus World, September 1994. The permanent blinding effect of battlefield laser weapons that were meant also to have an anti-sensor use was in fact likely to be at least several hundred meters or even a kilometer for the naked eye, and several kilometers for a person using optics. However, some articles continued to mention permanent blinding as an effect, for example, articles in *New Scientist*, Vol. 135, No.1833, and *National Defense*, December 1993.

[28] In a letter to the United Nations Secretary-General dated 9 February 1993. France based its request on Article 8, para. 3(a), of the Convention, which stipulates that if no review conference has taken place ten years after the entry into force of the Convention (it came into force on 2 December 1983), the Depository must call for such a conference if one State Party so requests.

[29] Dated 22 December 1993.

[30] See, in particular, articles by Jody Williams and Anita Parlow in *IRRC*, No.307, July-August 1995, pp. 375 and 391, respectively.

[31] GA res. 48/79 of 16 December 1993.

[32] The letter suggested the preparation of the Review Conference by a Group of Governmental Experts. An oblique reference to a possible new Protocol was made in these terms: "Once the experts have made significant progress in their efforts to amend Protocol II, the group could also consider any other proposal relating to the Convention and its existing or future Protocols". Neither the letter nor the GA resolution made any reference to laser weapons.

[33] The dates of the meetings were as follows: 28 February-4 March 1994 (primarily a meeting on procedure); 16-27 May 1994; 8-19 August 1994 and 9-20 January 1995. It was initially thought that there would only be three preparatory meetings, but during the August session it became clear that insufficient progress on the landmines issue meant that a fourth preparatory meeting was necessary.

Sweden and the other by the ICRC, were submitted at this meeting.[34] Sweden's proposal read as follows:

> "It is prohibited to use laser beams as an anti-personnel method of warfare,-with the intention or expected result of seriously damaging the eyesight of persons."[35]

The ICRC's proposal had a similar intent but attempted to be more explicit by avoiding any reference to intention or foreseeability:

> "1. Blinding as a method of warfare is prohibited;
> 2. Laser weapons may not be used against the eyesight of persons."[36]

The ICRC's formula tried, in particular, to ban blinding rather than just a type of weapon (which was the approach that had been recommended by the majority of experts at the fourth meeting of experts organized by the ICRC in April 1991[37]). Twelve countries[38] out of the 13 that spoke at this session indicated their approval of a ban on the use of lasers for the purpose of blinding but many stressed the importance of adopting wording that protected the normal use of lasers, for range-finding and target designation in particular.

Negotiation as such took place only during the fourth meeting of governmental experts,[39] during which two working sessions were devoted to the subject. In addition, the ICRC organized an informal meeting in order to discuss possible wording. During this discussion, several countries indicated that, although they were ready to accept a ban on blinding with laser weapons, they were uncomfortable with the idea of banning blinding weapons as such without specifying the type of weapon, and could therefore not accept the ICRC's proposal. During the two sessions[40] that debated the necessity for a new Protocol and the wording that ought to be adopted, 25 countries expressed their support for such a Protocol.[41] At the second session, the Chairman submitted to the delegations the following draft resulting from private consultations:

> "*Article 1*
>
> It is prohibited to employ laser beams of a nature to cause permanent blindness [serious damage] against the eyesight of persons as a method of warfare.
>
> *Article 2*

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[34] There was also a proposal by Sweden for a Protocol on Naval Mines (Doc. CCW/ CONF.1/GE/12) and by Switzerland on Small-calibre Weapon Systems (i.e. bullets, Doc. CCW/CONF.I/GE/16). In practice these two items received very little attention and the ICRC decided that as a matter of priority it was necessary at least to achieve a proper negotiation of a new Protocol on blinding laser weapons.
[35] Doc. CCW/CONF.l/GE.11, dated 9 August 1994.
[36] Doc. CCW/CONF.I/GE/CRP.28, dated 12 August 1994.
[37] See footnote 18 above, and *Blinding Weapons: reports*, pp. 353-356.
[38] Australia, Cuba, Cyprus, Germany, Iran, Mexico, Netherlands, New Zealand, Norway, Russia, Spain and Switzerland.
[39] See note 33.
[40] 13 and 17 January 1995.
[41] In addition to Sweden and the 12 countries listed in note 38, the following: Austria, Belgium, Bulgaria, Cambodia, Finland, France, Greece, India, Ireland, Pakistan, Poland and the United Kingdom.

> It is prohibited to [produce and] employ laser weapons primarily designed to blind [permanently].
>
> *Article 3*
>
> Blinding as an incidental or collateral effect of the legitimate employment of laser beams on the battlefield is not covered by this prohibition."

Most delegations were reasonably happy with this wording, especially as Article 3 provides for incidental blinding caused by the use of lasers not actually intended for this purpose, in particular range-finders. However, two delegations indicated that they had problems with draft Article I. France indicated its acceptance of the prohibition of the deliberate blinding of persons as a method of warfare, but felt that the wording chosen should not restrict the use of lasers for the detection of optical instruments. Further, it expressed a concern that the wording might not sufficiently protect soldiers who used lasers and incidentally produced blindness in an adversary. The second concern was shared by the United Kingdom, which felt that Article I might have the effect of excessively restricting the use of an otherwise acceptable weapon for fear that soldiers would be accused of having deliberately caused blindness with them. Both delegations thought that draft Article 3 was not sufficient to allay this concern. The delegation of the United States was the only one that indicated its opposition to the existence of a new Protocol on this subject. The decision was made by the Chairman to forward the draft Protocol to the Review Conference, without the addition of extra square brackets, together with an indication that the wording did not commit any delegation.[42]

Achieving consensus in favour of a ban on blinding laser weapons

ICRC, NGOs and political action

Although by the fourth meeting of governmental experts in January 1995 a large number of States from all continents were in favour of a protocol on blinding laser weapons, it had not been at all evident when the process began that a majority of States would be in favour. Indeed, several States had shown considerable reticence when the Group of Governmental Experts first met and most others had not been particularly interested. As it appeared likely that the Review Conference would decide to require consensus for any new protocol, the few States clearly not in favour of the protocol could block its adoption.

The ICRC therefore began a major effort to gain support from government ministries and National Red Cross and Red Crescent Societies. It also contacted some non-governmental organizations, in particular medical associations and organizations already active in trying to counter weapons problems, and informed the press. For this purpose it needed a tool which was more readily usable than the book containing the complete reports of the expert meetings it had held.[43] In September 1994 it therefore published an eight-page brochure on the subject, entitled Blinding Weapons: Gas 1918...Lasers 1990s?, with a cover picture of soldiers blinded by chemical weapons in the First World War. The brochure summarized known

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[42] Annex II to the Final Report of the Group of Governmental Experts, 20 January 1995, UN Doc. CCW/CONF.I/GE/23.
[43] *Blinding Weapons: reports*.

developments in anti-personnel laser weapons, indicated how they blind and why there is no protection possible, outlined the disabilities and severe depression caused by sudden blindness, and finally appealed "to the conscience of humanity to ensure that a flood of blinded soldiers or civilians will not be needed before intentional blinding is also outlawed". The ICRC also provided a "Questions and Answers" paper, which replied to the typical questions posed by the sceptical, such as "isn't it better to blind than to kill?", or "would a prohibition of blinding interfere with other legitimate military uses of lasers?".

Delegates of the ICRC visited several countries in order to discuss the matter with government officials, and in addition a large number of National Societies gave active support by contacting political figures[44] and generating public debate.[45] After receiving the ICRC's material, and in some cases further explanation, several significant professional associations and non-governmental organizations joined the ICRC's call for a ban on blinding weapons. They included the World Medical Association,[46] the World Blind Union,[47] the Cristoffel-Blindenrnission,[48] the International Initiative Against Avoidable Disability,[49] the Blinded Veterans Associations[50] and the World Veterans Association[51]. Some mainstream human rights non-governmental organizations also became active in working for a ban, most significantly Human Rights Watch,[52] and others such as Physicians for Social Responsibility, Pax Christi International and the International Society for Human Rights. Their activity, in addition to that of the ICRC, generated a certain number of articles in the press, most of which were favourable to a ban.[53]

Support was also sought from three international bodies, namely the European Parliament, the Organization of African Unity (OAU) and the Inter-Parliamentary Union. In all three cases, the subject was brought up in the context of discussions and resolutions on landmines, a problem far more in the public eye than blinding laser weapons. On 29 June 1995, the European Parliament adopted a "resolution on landmines and blinding laser weapons",

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[44] For example, the President of the French Red Cross sent a letter dated 17 November 1994 to French Prime Minister E. Balladur, urging the government to do all in its power to avoid the manufacture and proliferation of anti-personnel laser weapons and giving his opinion that the 1980 Convention would be the appropriate means to ban blinding as a method of warfare.

[45] For example, debates in the United Kingdom's House of Lords, 14 March 1994, *Hansard*, Vol. 553, pp. 7-8; and in the House of Commons, 19 January 1995, *Hansard*, Vol. 262, No.34, pp. 689-690, in which, in reply to a question, the Secretary of State for Defence indicated that: "the UK has no plans to develop or test a laser weapon designed permanently to blind human beings. The feasibility of making use of temporary dazzle effects was investigated in 1983 and tests on one system were conducted which were subsequently discontinued".

[46] Public statement of 24 April 1995: "...the development of anti-personnel lasers as blinding weapons represent[s] one of the biggest public health issues facing the world today. The World Medical Association fully supports the ICRC in its efforts to combat this growing menace". Support was also given in the Editorial of the Lancet, Vol. 344, 17 December1994.

[47] Statement made at the Vienna session of the Review Conference of the CCW.

[48] *Idem*

[49] *Idem*

[50] Resolution 26-95

[51] Resolution 23, *Prohibition of anti-personnel blinding laser weapons*, adopted at its 21st General Assembly (1994).

[52] See below for more detail on their contribution. It should also be mentioned that several influential members of Pugwash became active in working towards a ban after the subject was discussed during its 44th Annual Conference (1994).

[53] See, for example, "Eyewash no defense", *International Defense Review*, Vol. 28, July 1995; "Thou shalt not blind", *The Economist*, 15 October 1994; "A very ugly genie", *Military Technology*, MILTECH -5195; Barry Fridling, *Blinding Lasers: The Need for Control*, US Naval Instiwte, October 1988; Colman McCarthy, "Battlefield instruments of blindness", *Washington Post*, 16 May 1995.

calling on the Council of Europe to take joint action to, *inter alia*, add a Protocol to the 1980 CCW "banning blinding laser weapons".[54] The resolution on landmines adopted by the Council ofMinisters of the OAU on 23 June 1995 contained an operative provision supporting "the adoption, by the Review Conference, of a Protocol banning blinding laser weapons"[55] and similar wording was contained in the resolution adopted by the 93rd Inter-Parliamentary Conference.[56]

Developments relating to the imminent manufacture of certain laser weapons

Between the end of the fourth meeting of Governmental Experts and the Review Conference itself there were indications that two types of portable laser weapons, ostensibly or allegedly intended for anti-personnel use, were at the point of manufacture and sale.[57]

The first concerned a laser marketed by NORINCO, a Chinese company, at an arms fair in South-East Asia in spring 1995.[58]The device, called a "Portable Laser Disturber", was described in the sales leaflet as follows: "one of its major applications is, by means of high-power laser pulses, to injure or dizzy (sic) the eyes of an enemy combatant, and especially anybody who is sighting and firing at us with an optical instrument, so as to cause him to lose combat ability or to result in suppression of his observation and sighting operation. Besides, the high-power laser beam can damage or invalidate any enemy photo electric sensor in highly converging optical system..."

The second was a laser developed in the USA, the Laser Counter measure System (LCMS),[59] mounted on an M16 rifle, which had been developed and tested a few years previously but was due to be manufactured for sale to the army in 1995. This system was described having "the primary objective to detect, jam and suppress threat fire control, optical and electro-optical subsystems".[60] It certainly had the capacity to blind permanently at considerable distances (up to one kilometre), and use of this purpose was not excluded.[61]

These developments seemed somewhat discouraging for those working for a ban of blinding laser weapons, but actually they had the beneficial effect of eliminating a certain indifference on the part of many government ministries which still believed that such developments would probably take place only in the distant future -if at all. They also proved that blinding laser weapons would not be limited to very few armies but that proliferation would be likely to occur rapidly, as the experts convened by the ICRC in 1991 had warned.

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[54] Resolution A4-0119195, operative para. 6 (a) (iii). See also preambular paras. O and P.

[55] Resolution on the 1980 United Nations Convention on Certain Conventional Weapons and problems posed by the proliferation of anti-personnel mines in Africa, operative para. 7, also preambular para. 8.

[56] Resolution adopted by consensus on 1 April 1995 and entitled *The international community in the face of the challenges posed by calamities arising from armed conflicts and by natural or man-made disasters*.

[57] The only example of a blinding laser that was actually deployed was the "Laser Dazzle Sight" placed on British battleships in the early 1980s and since discontinued; see *Blinding Weapons: reports*, pp. 109-110 and 170-172, and note 45.

[58] China North Industries Corp. (NORINCO). Reports in Jane's Defence Weekly, 27 May 1995, p. 3; *International Defense Review*, May 1995, pp. 19-21

[59] Also referred to as the PLQ-5. The system was developed by Lockheed-Sanders and the army hoped for government approval in June 1995 for a ful1scale production contract with the same company. Congress decided to delay its decision. See Human Rights Watch Arms Project, *U.S. Blinding Laser Weapons*, New York/Washington DC, Vol. 7, No.5, pp. 2 and 9; *Inside the Pentagon*, 13 July 1995, p. 9.

[60] Lockheed-Sanders Fact Sheet, Laser Countermeasure System (LCMS), AN/PLQ-5, 1994.

[61] *Law of War Review* of 16 September 1994, DAJA-I0 (27-la), US Department of the Army.

A very important step was the decision by Human Rights Watch Arms Project to become actively involved in this issue. It researched into the various military laser systems that were being developed in the United States and were intended to damage optical systems and/or eyesight.[62] In May 1995 it released a report[63] containing not only details on these systems but also a number of recommendations. These included the cancellation by all countries[64] of the development of all tactical laser weapons because of their potential use as blinding laser weapons and the adoption of a new Protocol to the CCW prohibiting blinding as a method of warfare. The publication of this report, subsequent press comment and further contacts by the ICRC prompted a detailed high-level study within the United States Department of Defense on the desirability of these systems and a review of the United States' hitherto objection[65] to the adoption of a Protocol on this subject.

Another major factor was the interest in the issue taken by three politicians, namely, Senator Patrick Leahy and Congressmen Lane Evans and Ronald Dellums. They wrote letters to President Clinton and the Secretaries of State and Defense in December 1994 and. January 1995, respectively, indicating their desire for the United States to support a new Protocol banning blinding laser weapons. The report by Human Rights Watch provided further impetus and a similar letter, signed this time by 51 Senators and Members of Congress was sent to the Secretary to Defense on 31 July 1995.[66]

The new policy of the United States Department of Defense was announced by Secretary of Defense William Perry in a News Release on 1 September 1995, three weeks before the opening of the Review Conference of the CCW in Vienna. The announcement read as follows:

> "The Department of Defense prohibits the use of lasers specifically designed to cause permanent blindness of unenhanced vision and supports negotiations prohibiting the use of such weapons. However, laser systems are absolutely vital to our modem military. Among other things, they are currently used for detection, targeting, range-finding communications and target destruction. They provide a critical technological edge to US forces and allow our forces to fight, win and survive on an increasingly lethal battlefield. In addition, lasers provide significant humanitarian benefits. They allow weapons systems to be increasingly discriminate, thereby reducing collateral damage to civilian lives and property. The Department of Defense recognizes that accidental or incidental eye injuries may occur on the battlefield as the result of the use of legitimate laser systems. Therefore, we continue to strive, through training and doctrine, to minimize these injuries."

Negotiation of Protocol IV during the Review Conference

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[62] It refers to these as "tactical laser weapons".
[63] Human Rights Watch Arms Project, *op. cit.* (note 59).
[64] In addition to detailed information on ten active or dominant blinding laser programmes in the United States, the report named the following countries as having allegedly also done some research into blinding laser weapons: China, France, Germany, Israel, Russia and the United Kingdom, ibid., pp. 14-15.
[65] US opposition to a Protocol was also criticized in the press, e.g. Colman McCarthy, "Battlefield instruments of blindness", Washington Post, 16 May 1995.
[66] Letters on file with Human Rights Watch Arms Project, Washington DC.

Ambassador Hoffmann of Germany was elected Chairman of Main Committee III, which was given the task of negotiating Protocol IV on Blinding Laser Weapons. As the main topic of the Review Conference was the amendment of the landmines protocol, Ambassador Hoffmann indicated his determination to conclude the negotiations on draft Protocol IV as quickly as possible and set aside for this purpose four sessions (i.e. four half days). The principal session was on 3 October; during this session a consultation took place between a small number of States which effectively decided on the wording of what are now Articles 2 and 3, Article 2 having been throughout the most controversial. This wording was a compromise worked out between the few States most closely concerned and was represented by those States as the only one possible. The session of 5 October was therefore in practice limited to general statements of support for the new Protocol, although many governments stressed that the new Protocol was not as strict as they would have wished.[67]

As each session discussed several Articles of the Protocol, it will be easier to describe the negotiating history of the Protocol by analysing each Article rather than by giving a strictly chronological description of events. However, it should be mentioned at this stage that Ambassador Hoffmann began the negotiations with not only the Chairman's text, which had been submitted to the Review Conference by the Group of Governmental Experts, but also with a rather more elaborate text submitted to the Conference by the government of Austria. During the sessions, additional proposals were put forward by the United States, Bulgaria and Germany. A background paper was also submitted by the Netherlands,[68] which, however, did not include suggested wording.

The other point worthy of note is that it was not certain at the opening of the Review Conference whether China would support this new Protocol, as it had thus far expressed no opinion on the subject other than a general indication that the Conference should concentrate on landmines. Both the prospective Chairman of Committee III and some governments had approached China prior to the Conference in order to encourage it to support the proposed Protocol. The representative of China made it clear during the first session on 26 September that his country was ready to negotiate the wording of the new Protocol.

Protocol IV: the content

Scope

There is no particular Article on the scope of application of Protocol IV and therefore it would seem at first sight to be governed by Article I of the framework Convention, i.e. international armed conflicts as described in Article 2 of the Geneva Conventions of 1949. However, the negotiations in Vienna made it clear that delegations intended this Protocol also to apply at least to non-international armed conflicts as described in Article 3 of the 1949 Geneva Conventions.

The issue of scope of application was discussed in the first and third sessions. The Austrian proposal was to the following effect:

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[67] Fifteen States made a statement to this effect

[68] Doc. CCW/CONF.I/MCIII/WP.l, 26 September 1995.

> "this Protocol shall apply in all circumstances including armed conflict and times of peace".[69]

Seven States indicated their preference for the Protocol to be applicable "in all circumstances" and three preferred it to apply to international and non-international armed conflicts. China proposed that the scope of application be the same as that agreed to in the context of amended Protocol II, which was expected to be non-international armed conflicts as defined in common Article 3 of the Geneva Conventions. Agreement was reached on this basis and recorded in the report of Main Committee III to the plenary.[70]

The only reason why this scope of application is not specified in Protocol IV is because negotiations on the landmines Protocol broke down in Vienna (for reasons other than the scope Article); as the final wording was not adopted for Protocol II, it was not possible to include it in Protocol IV. However, it was felt worthwhile by all in Vienna to adopt Protocol IV, and a number of delegations thought that the issue of a scope Article could be taken up again if necessary at a subsequent review conference.

A confirmation of the intention of the Vienna Conference is to be found in a resolution adopted by the 26th International Conference of the Red Cross and Red Crescent, which:

> "*welcomes* the general agreement achieved at the Review Conference that the scope of application of this Protocol should cover not only international armed conflicts".[71]

A stronger indication of the intention never to use the weapon is to be found in the Final Declaration of the Review Conference,[72] in which the High Contracting Parties of the 1980 Convention:

> "solemnly declare...their recognition of the need for achieving the total prohibition of blinding laser weapons, the use and transfer of which are prohibited in Protocol IV".

Article 1

The prohibited weapon

This is a revised version of what was originally Article 2 of the Chairman's text. The final version was heavily influenced by the wording of the new United States Department of Defense policy, i.e. the prohibition of the employment of "laser weapons specifically designed to cause permanent blindness to unenhanced vision"; a proposal to this effect was included in the working paper submitted by the USA.[73]

Many delegations were of the opinion that this proposal was not sufficiently clear. First of all it was felt that "unenhanced vision" needed explanation. "The wording adopted, namely "to

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[69] Doc. CCW/CONF.I/MCIII/WP.2, 26 September 1995, Article 1, para. 2.
[70] Doc. CCW/CONF.1/4, 12 October 1995. See also Doc. CCW/CONF.I/MCIII/ WP.4/Rev.2, 5 October 1995, which is the Protocol as it appeared when negotiations concluded in the Third Committee and which includes the scope in Article 1 but leaves open the exact wording.
[71] 26th International Conference of the Red Cross and Red Crescent (1995), Resolution 2, Section H, para. (f), *IRRC*, No.310, January-February 1996, p. 68.
[72] Doc. CCW/CONF.1/16.
[73] Doc. CCW/CONF.I/MCIII/WP.3. 27 September 1995.

the naked eye or to the eye with corrective eyesight devices", was proposed by the US delegation, which also explained that "corrective eyesight devices" meant prescription glasses or contact lenses. The delegation also explained that the term "unenhanced vision " was included in order to exclude systems used for countering optical systems. However, as several new laser systems appeared to have a dual use (namely, use against optical systems and against eyesight), the term "specifically designed" was clearly of critical importance for the meaning of this provision. It is not surprising, therefore, that much discussion centred on this issue.

The United States delegation stated several times that "specifically" would cover the situation where only one of the functions of the laser was to blind persons. However, the delegation of France understood the word to mean "exclusively", whereas the UK delegation indicated that it preferred the use of the word "primarily", which was the wording in the Chairman's text. The delegate of the ICRC strongly argued that a prohibition of a weapon should not depend on an ambiguous word that was also likely to lead to difficulties in translation. The ICRC therefore urged the delegates to spell out in the provision the meaning that the US delegation attributed to the word "specifically", thus removing all doubt. After consultations with both capitals and between interested States, this was agreed to by the final session on 5 October 1995. All delegates were of the opinion that this was the best definition of the prohibited weapon that could be achieved in the time allotted and no one suggested describing the technical characteristics of such a weapon.[74]

Production and transfer

The prohibition of production was already included in square brackets in the Chairman's text and the prohibition of transfer was first introduced in the Austrian proposal.[75]

Ten States wished to have production of the weapon prohibited in the Protocol, but four States spoke against, arguing that this would require verification measures and that there was no time to negotiate the issue. The Chairman was also of the opinion that a ban on production would certainly need intrusive verification measures and therefore had doubts as to its inclusion in the Protocol. However, on adoption of the Protocol, the States in favour of a ban on production included in the final report of Main Committee III[76] a reference to taking the matter up again at a future Review Conference.

The ban on transfer met with success, however. Austria strongly argued in favour of this proposal, pointing out the particular danger of a State party to the Protocol transferring the weapon to a non-party State which might well then use it. Austria's position was supported by most delegations. Several States were sceptical and argued that as they were having enough difficulty agreeing on the wording regulating use, they should not complicate matters by starting negotiations on transfer. However, in the face of the determination of many delegations, they agreed to seek further instructions from their capitals on this point. By the final meeting on 5 October this provision could be inserted, although as late as the third meeting on 3 October it was uncertain whether this would be the case.

[74] The ICRC was also of the opinion that the Protocol should not attempt a technical description, as this would be extremely difficult to do and would therefore considerably delay the adoption of a Protocol.
[75] See note 69, Article 3, para. 3.
[76] See note 70.

Article 2

This is a radically modified form of Article 1 of the Chairman's text, which, it will be recalled, reads as follows: "It is prohibited to employ laser beams of a nature to cause permanent blindness [serious, damage] against the eyesight of persons as a method of warfare".

This provision caused the greatest difficulty, as it was intended not only to prohibit blinding laser weapons meant for anti-personnel use but also to prevent other lasers from being used in this way, The phrases that posed the most problems were: "it is prohibited to" and "as a method of warfare".

With regard to the first phrase, the governments of the United Kingdom and the United States stressed that, as many lasers were already used on the battlefield on a regular basis for range-finding and target designation, there was a clear danger that soldiers would inadvertently or incidentally blind. Despite draft Article 3, they were concerned that soldiers would find themselves open to war crimes charges and they therefore felt that the obligation should be aimed at the State rather than at the soldier. The United Kingdom indicated that if the wording in the Chairman's draft were adopted, the UK would have to restrict the normal use of lasers in order to avoid all possibility of blindness, and this would be at the expense of the accuracy of other weapons. Two other States recognized that this was a problem.

This concern was not shared by all; the delegation of Germany in particular pointed out that the real issue to be concerned about was potential victims of blinding and not potential war criminals. Most delegations were not willing to give up a general rule of this nature and therefore major efforts were made to find a formula that would be meaningful and still be acceptable to States which could not accept the Chairman ' s draft.

On 29 September the German delegation submitted a text which attempted to solve the problem by referring to orders given:

> "It is prohibited to order the use of laser beams for the purpose of blinding a person permanently or to conduct hostilities on this basis".[77]

A number of delegations had difficulties with this formula. Some believed that as soldiers give orders it did not solve the problem of personal liability; moreover, it introduced the element of intent, which was difficult to prove. Others, including the Chairman and the ICRC delegation, pointed out that both domestic criminal law and existing humanitarian law impose prohibitions on certain actions by combatants where the element of intent needs to be shown, and therefore this would not be anything new. On the other hand, the German formula was opposed by the delegation of China, which felt that the formula was not strict enough as it would not cover a soldier blinding combatants on his own initiative.

With regard to the phrase "method of warfare", the United States indicated that it could not accept such ambiguous language.[78] The German proposal "conduct hostilities on this basis"

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[77] Working paper of 29 September 1995; on file with the author. The wording was inspired by Article 40 of Additional Protocol I of 1977, which provides that "It is prohibited to order that there shall be no survivors, to threaten an adversary therewith or to conduct hostilities on this basis".

was meant to address this problem and there was also a proposal by Bulgaria which avoided the phrase altogether:

> "It is prohibited to employ laser beams or any other laser device as a laser weapon, as defined under Article 1".[79]

It is worth noting, however, that most States would have accepted a ban on using laser weapons to blind "as a method of warfare".[80]

No agreement could be found during the session of 29 September. In preparation for the next session of 3 October, the Chairman submitted a text which borrowed language from the statement of the United States Secretary of State, which referred to "minimizing these injuries" (i.e. blindness) "through training and doctrine". His draft Article read as follows:

> "It is prohibited to employ laser beams or any other laser device as a laser weapon...States shall seek to implement this obligation through training and other appropriate measures in their armed forces".[81]

The first part still caused problems for a few delegations because it contained an element of intent, whereas others thought that it did not specify clearly enough the prohibition of blinding. However, it was generally felt that there was common ground that laser systems should not be misused as blinding weapons.

A small working group was organized by the Vice-Chairman, Mr Poptchev of the Bulgarian delegation, which resulted in the following text:

> "The High Contracting Parties shall issue instructions to their armed forces to use laser [systems] in accordance with their normal function and take other practical measures in order to minimize and exclude, to the extent possible, the incidents of permanent blindness to unenhanced vision...as a result of the [legitimate] use of laser [systems)".[82]

Shortly after the presentation of this document, the delegation of Sweden indicated to the Chairman its desire to meet again informally with a few other delegations in order to improve on this wording. It was of the opinion that the expression "in accordance with their normal function" was not explicit enough and was convinced that a little more negotiation would result in a much better formulation. It was already late in the evening at the stage and the rest of the time was spent in these informal negotiations. The present language of the Protocol emerged from these negotiations and unfortunately the author of this article is not in a

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[78] This was actually a reflection of the fact that the phrase "method of warfare" had created difficulty for the United States in the context of the 1993 Chemical Weapons Convention; it therefore wished to avoid further use of such wording in any context.

[79] Doc. CCW/CONF.I/MCIII/CRP.I, 29 September 1995.

[80] The President of France, for example, in reply to Parliamentary questions, indicated that *"Il est. a solemner que la France souscrit egalement a I' objectif de prohibition de l' aveuglement delibere des personnes en tant que methode de guerre",* Questions ecrites des parlementaires, SIRPA ACTUALITE No.30, 9 September 1995. It is also worth noting a preambular paragraph in the Final Declaration of the Review Conference: “conscious of the urgent need to counter the silent and invisible threat to human sight posed by the threat of blinding laser weapons”

[81] Doc. CCW/CONF.I/MCIlI/CRP.XX, 2 October 1995.

[82] Doc. CCW/CONF.I/MCIII/CRP.3. 3 October 1995.

position to indicate the process which led to this final version. However, it would appear that the idea of using the term "feasible precautions" came from the Netherlands delegation.

The wording which emerged was presented at the meeting of 5 October and was not contested by delegations.

One can see from the formulation that the duty has been placed on the level of the State, as desired by some delegations, and takes the form of appropriate training and "other practical measures". This clearly means that orders cannot be given to use lasers to blind combatants and that efforts must be made to train soldiers to use laser equipment so as to avoid such a result as far as possible. It also means that, if lasers were to be used to counter optical equipment, particular efforts would have to be made to avoid blinding individuals, as in practice such lasers would be the most serious hazard to eyesight. This issue will be commented on further below. Finally, regarding the term "other practical measures", delegations did not list examples of such measures during the sessions, but some indicated informally that they could certainly include the introduction of eye-safe range-finders, as some States are already beginning to do.

Article 3

This Article is very similar to Article 3 of the Chairman's text. The word "legitimate" was questioned by a few delegations during the negotiations. It was explained that it was included in order to specify that there were correct and appropriate uses of lasers on the battlefield. By implication, however, we may also conclude that there are illegitimate uses.

The main purpose of this Article is to allow for the continued use of battlefield lasers, which has been common for some time, and which have not until recently been designed for use against eyesight. However, in the same way that humanitarian law prohibits direct attacks on the civilian population but recognizes that it can be affected by bombardments against military objectives, this Article recognizes that lasers may not be used directly against the eyesight of soldiers but that they may be incidentally .affected when lasers are used for other purposes. However, to take the analogy further, Article 2 provides that precautions must be taken to avoid this as far as possible, just as Article 57 of Additional Protocol I requires precautions when planning attacks against military objectives which might affect the civilian population. It is sincerely hoped, however, that this Protocol will be more successful in avoiding incidental blindness than has been the case for civilian casualties resulting from attacks against military objectives. It goes without saying that this Protocol bans the deliberate blinding of both soldiers and civilians.

The phrase "including laser systems used against optical equipment" was introduced only during the last informal consultations that took place at the request of Sweden on the evening of 3 October. Up until that moment, delegations had indicated that the version in the Chairman's text was satisfactory. This phrase was apparently included so that certain delegations could accept the final formulation of Article 2.

Both the term "unenhanced vision" found in Articles 1 and 2 and the phrase "including laser systems used against optical equipment" were included in order to take into account lasers used for the detection and destruction of certain optical systems.[83]

However, the interpretation of Article 3 is not without difficulty. The provision speaks of "incidental or collateral effects" when lasers are used against optical equipment. If the optics concerned are systems which view the battlefield and do not involve the laser passing through them directly into the eyes of the person making use of them, then the use of that laser can be seen as an anti-materiel use and certainly not an anti-personnel use. In this case, incidental blindness might indeed be caused in an individual who happened to be in the path of the beam but was not intentionally targeted. However, if lasers were used against direct optics, such as binoculars, the lasers would have no effect at all on the binoculars but would certainly blind the individual holding them. Such blindness could hardly be called "incidental or collateral" as it would be deliberate and direct. It is submitted, therefore, that according to a normal interpretation of Article 3 the phrase "including laser systems used against optical equipment" could not be used to legitimize the deliberate blinding of persons using binoculars or other direct optics.

Article 4

It will be recalled that the Chainman's text contained no definition. The Austrian proposal did contain a number of suggested definitions, but only a definition of "permanent blindness" was felt necessary by some delegations. The United States explained that a precise figure needed to be given in order to ensure compliance with the Protocol, especially as blindness did not necessarily mean total loss of vision and that indeed the use of lasers would frequently not result in such total loss. However, Main Committee III experienced great difficulty in deciding on a definition because the types of blindness caused by lasers have not been quantified; definitions of blindness that do exist are based on loss of sight caused by disease.

The Austrian proposal referred to the definition of "blindness and low vision as defined in the International Statistical Classification of Diseases and Related Health Problems of the World Health Organization". "Blindness and low vision" is quantified by the WHO (using what is known as the "Snellen" scale) as visual acuity of less than 20/200, which means that a person cannot see at 20 feet what a normally sighted person can see at 200 feet. The United States proposal used the figure 20/400,[84] which is the WHO definition of "blindness".

Before the session of 3 October, the ICRC arranged for a visit to Vienna by Professor Marshall, a leading specialist on the effects of lasers on the eye who had already contributed to ICRC expert meetings between 1989 and 1991. In an informal meeting he explained to a number of delegations that visual acuity, on which the WHO definition was based, measured in practice the extent to which vision was blurred, as WHO 'definitions were largely influenced by the organization's work on the treatment of cataracts. Blinding by laser weapons would involve the destruction of certain portions of the retina. Loss of central

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[83] For example, the statement of the French President: *"Elle a cependant besoin de pouvoir employer le laser dans ses usages courants, ainsi qu' a des fins de detection et de neutralisation des capteurs"*, Questions ecrites des parlementaires, *op. Cit*. (note 80).

[84] See note 73, Article 4; 20/400 means that a person cannot see at 20 feet what a normal person can see at 400 feet

vision, which was a very likely result, would result in the total loss of visual acuity, so a definition based on visual acuity was irrelevant to blindness caused by laser weapons.[85] Professor Marshall therefore strongly recommended a functional test rather than one based on WHO figures. This opinion was shared by the UNDP representative of the Conference, Sir John Wilson, a specialist on the definition of blindness as assessed by the WHO. Both he and Professor Marshall suggested using the phrase "loss of sight that is permanent, seriously disabling and irreparable". A few delegations, however, insisted on maintaining a figure as, they said, this was important for establishing whether the Protocol had been violated. One delegation added that it was also important for its weapons designers! They conceded, however, that a figure alone would be meaningless for non-specialists and that a descriptive phrase would be useful.

The utility of the description in Article 4 is to confirm that "blindness" does not necessarily mean total loss of sight, a fact which is not generally known to non-specialists. This is important point: damage by laser weapons may result in partial loss of sight, although this will depend on the energy level of the weapon and the distance of the victim, for military lasers are certainly capable of inflicting total blindness. The other criteria, namely, "irreversible", "uncorrectable" and "no prospect of. recovery" are the normal result of laser injury. With regard to the measurement of visual acuity, it has already been indicated that this is not appropriate for laser injury. However, Professor Marshall explained that in cases of cataract, people with visual acuity of less than 20/200 were not able to read or to get around, and such functional loss was also likely to result from laser Injury.

Delegates were aware that the Snellen scale was not very suitable for measuring blindness caused by lasers, especially as it did not contain any reference to loss of field of vision, but as it was the only internationally recognized measurement they wished to maintain it. However, in the Final Declaration of the Conference they indicated their wish to return to this problem of definition should the need arise.[86]

Implementation

Article 4 of the Austrian proposal was a draft Article on "Compliance" containing the following:

> "The States Parties undertake to consult each other and to cooperate with each other in order to resolve any problems that may arise with regard to the interpretation and application of the provisions of this Protocol".

The proposal was strongly supported by India but unfortunately was not followed up. This was not really because of opposition by other States but because of lack of time and the difficulty of arriving at an agreed version of what is now Article 2.

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[85] For greater detail on the blinding effects of laser weapons, see *Blinding Weapons*: *reports* (note 15), First Round Table of Experts, pp. 29-45, and First Working Group of Experts, pp. 98-99 and 102-139.
[86] See note 72. The Declaration states that "The High Contracting Parties...solemnly declare...their wish to keep the blinding effects related to the use of laser systems under consideration...". The preamble also notes that a number of issues could be considered in the future, for example the definition of "permanent blindness", including the concept of field of vision.

The likely effect of the new Protocol

There can be no doubt that Protocol IV represents a major achievement. It is the first time since 1868[87] that a weapon has been prohibited before it has been used on the battlefield. It has also stigmatized deliberate blinding.[88] Although the Protocol does not contain a simple prohibition of blinding as a method of warfare, there can be no doubt that it was adopted because of the concern felt about a weapon designed to be aimed at eyesight. As a Director of the ICRC, Mr Yves Sandoz, stated at the final plenary in Vienna, this Protocol represents a victory of civilization over barbarity.[89]

The Protocol requires 20 States to notify their consent to be bound by it before it enters into force;[90] at the time of writing one State has already done so.[91] Most States are likely to submit Protocol IV to their Parliaments at the same time as amended Protocol II[92] and this may cause a little delay. The Final Declaration[93] of the of the Review Conference states that: "The High Contracting Parties...Solemnly Declare...Their desire that all States, pending the entry into force, respect and ensure respect of the substantive provisions of Protocol IV to the fullest extent possible".

State practice so far is encouraging. At a news briefing held on 12 October 1996, the US Department of Defense announced that the Army had been ordered on 5 October to stop the LCMS program and that it had been terminated. The reason given, as reported at the briefing, was as follows:

> "Deputy Secretary John White determined that [the laser counter-measures program] did not fit in under the proscription against blinding lasers that are intended to blind...We have an opportunity to stop a proliferation of a new and dangerous weapon, we hope. We are now engaged in discussions at the Conference on Conventional Weapons in Vienna to do just that. Secretary Perry felt strongly that we should take a lead role in that by swearing off the development and use of lasers intentionally designed to blind people".[94]

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[87] When exploding bullets were prohibited by the St. Petersburg Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight.

[88] Several States indicated in the formal plenary meeting of Committee III on 6 October that they interpreted the Protocol as banning blinding as a method of warfare. It is also worth noting the resolution of the European Parliament entitled *Resolution on the failure of the international conference on anti-personnel mines and laser weapons* of 16 November 1995, paras. H and I of which read as follows: "welcoming the agreement on a Protocol to the Convention on Certain Conventional Weapons to restrict the use and transfer of blinding laser weapons, but regretting that the Protocol fails to ban the production of blinding laser weapons and provides loopholes for the production, use and transfer of some blinding laser weapons, including those that target optical systems; believing that blinding as a method of warfare is abhorrent and in contravention of established custom, the principles of humanity and the dictates of the public conscience...".

[89] The original French text was as follows: *“L'adoption du Protocole sur les armes a laser aveuglantes est un succes de la civilisation sur la barbarie. Au-dela du seul texte de ce Protocole, ce que MUS retiendrons en effet de la decision prise aujourd'hui, ce que les peuples comprendront, c'est que les Etats n'acceptent pas I' idee que les hominess puissent deliberement aveugler d'aulres hommes, en quelque circonstance que ce soit”.* On file with the author.

[90] Article 5, para. 3, of the framework Convention.

[91] Finland, on II January 1996.

[92] Protocol on Prohibitions or Restrictions on the Use of Mines, Booby Traps and Other Devices as Amended on 3 May 1996. Adopted by the first Review Conference of the 1980 CCW.

[93] See note 72.

[94] Defenselink transcript, Department of Defense News Briefing, 12 October 1995.

At the final plenary session in Vienna, the Chinese delegate welcomed Protocol IV, stating that it would reduce the cruelty of war and that all States should ratify it. There are indications that NORINCO has withdrawn the anti-personnel laser from the market and there is no evidence that any other anti-personnel laser programmes are being pursued elsewhere.

It is noteworthy that State practice so far seems to be in keeping with the general intent of the new Protocol and is not being based on the wording of the Protocol, which appears to exempt the use of lasers against optics. Indeed, some States were reticent to adopt a provision simply prohibiting the use of lasers against eyesight as a method of warfare (as originally suggested by Sweden) for fear of being accused of violating the Protocol should blindness incidentally occur when range-finders were being used. Therefore it is difficult to imagine how they could introduce anti-optics lasers given that these pose a much greater threat to eyesight than any other lasers. In the technical literature, so-called anti-sensor lasers were frequently alluded to as being useful for anti-personnel purposes and the withdrawal of the LCMS, together with the explanation given, seems to confirm this.

It is earnestly hoped that this trend will continue and that the Protocol will have the necessary effect without need for further negotiation. In the Final Declaration,[95] the Review Conference notes that "a number of issues could be considered in the future, for example at a review conference, taking into account scientific and technological developments, including the questions of prohibition on the use, production, stockpiling and transfer of blinding laser weapons and the question of compliance with regard to such weapons...".

It is the author's opinion that none of this will be necessary if States implement the Protocol in accordance with its general goal, as appears to be the case so far. However, vigilance will be required both on the national and the international level to ensure that this is done.

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[95] See note 72.

The 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict and the notion of military necessity
by Jan Hladík

The review of the 1954 Convention and the adoption of the Second Protocol thereto (26 March 1999)

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Contents

One of the most widely discussed and controversial issues during the review of the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict (of 14 May 1954 – hereafter "the Convention") [1] was the meaning of the notion of "military necessity" [2]. The Convention refers to the concept twice; first, with regard to cultural property enjoying general protection it uses the term "imperative military necessity" (Article 4, paragraph 2), and, second, with respect to cultural property under special protection, it speaks of "unavoidable military necessity" (Article 11, paragraph 2).

The reference to "imperative military necessity" in Article 4, para. 2 of the Convention enables the States party to use cultural property and its immediate surroundings or appliances for military purposes and to conduct hostilities against such property "where military necessity imperatively requires such a waiver". In view of these not very strict conditions, the scope for invoking the waiver is quite large. UNESCO has no information, however, about the practice of States.

The notion of "unavoidable military necessity" in Article 11, para. 2 has stricter conditions for its application to cultural property placed under special protection. In particular, immunity may be withdrawn “only in exceptional cases of unavoidable military necessity” and “only for such time as that necessity continues”; it is further provided that such necessity can only be established at a higher command level. At the moment, six cultural sites are granted special protection under the 1954 Convention. They are all registered in the International Register of Cultural Property under Special Protection (Article 8, para. 6 of the Convention).

The inclusion of the notion of military necessity in the Convention was the result of fierce negotiations at the Diplomatic Conference that drew up the 1954 Convention. As many questions discussed in 1954 surfaced again during the review procedure, the main points made during those debates must be briefly examined.

The results of the 1954 Diplomatic Conference
The Secretariat’s draft for the Conference, circulated in 1953, contained two references to “imperative military necessity” [3] and one reference to “unavoidable military necessity” [4]. The Secretariat’s commentary on draft Article 4 (“imperative military necessity”) stated that “[t]he obligation to respect cultural property is liable to conflict with the requirements of military operations. It is, however, often possible to find a compromise between military necessities and the task of protecting cultural property” [5]. It went on to say that “[i]n order that there should be no abuse of so-called military necessities, it has been provided in paragraph 1 of *Article* 4 of the Convention, that the obligation to respect cultural property situated within the territory of another Contracting Party shall lapse only in cases of ‘imperative’ military necessity”. [6]

When commenting on the possibility of withdrawing special protection (“unavoidable military necessity”), the Secretariat pointed out that “[i]t should here be emphasized that, in using the term ‘unavoidable’ in connection with special protection, it was intended to give it a connotation even stronger than that implied by the expression ‘imperative military necessity’ used in Article 4, paragraphs 1 and 2, in connexion with the general provisions governing the protection of cultural property and the Contracting Parties’ obligation to respect such property. This distinction should therefore be understood as reflecting the greater degree of protection provided for in Chapter II. Moreover, it was considered desirable to avoid a situation in which any officer or holder of rank whatever might, on the field of operations, constitute himself the judge of the ‘unavoidable’ character of a given military necessity, and decide as to it without due thought. It has therefore been specified that it should be the Staff of a large formation, i. e., at least a Divisional Staff, which should take the responsibility for so serious a decision”. [7]

Two opposite tendencies arose during the Conference discussions. Some States wished to exclude this option from the Convention, claiming that it would diminish the scope of protection and open the door to abuses; others insisted on its inclusion, giving various reasons such as recognition of the concept of military necessity by Article 50 of the First Geneva Convention [8] or the fact that “to close the door to those things which were militarily unavoidable in the face of a mission assigned by competent governmental authorities, might have a disastrous effect upon the basic aims of the Convention”. [9]

The biggest practical problem, however, is that the Convention does not define the notion of military necessity. It is therefore up to each State party to interpret the concept in a concrete case. To give an example, Croatia stated in its latest report on the implementation of the Convention that “as for Article 4, paragraph 2, of the Convention, cases should be mentioned where relentless enemy attacks necessitated some deviations from the Convention. An example of it is the defence of

Vukovar, which, besieged for many months, had to organize defence against incessant air and artillery attacks intended to take the town". [10]

It is obvious that in the event of armed hostilities the interpretation of such a provision may vary and may even lead to abuse. For this reason, the question came up again in the course of the review of the Convention, which began in the early 1990s, mainly as a reaction to the destruction of cultural heritage during the conflict in the former Yugoslavia.

The review of the 1954 Convention

The Netherlands, one of the most active countries in the review procedure of the Convention, submitted to the 140th session of UNESCO's Executive Board an explanatory note which, among other things, questioned the adequacy of the exceptions regarding "military necessity" in the sense of Article 4, para. 2 and their conformity with the present state of international humanitarian law [11].

As a result of the interest of a number of Member States in the review of the Convention, the Director-General of UNESCO decided to commission a study on the possible improvement of the Convention. The study was undertaken by a UNESCO consultant, Professor Patrick Boylan, Vice-President of the International Council of Museums. Published in 1993, the study examines the implementation of the Convention since 1954 and makes a number of recommendations for its improvement in order to enhance its relevance for the present day [12]. Chapter 4, entitled "The 1954 Convention's concepts of protection, safeguarding and respect for Cultural Property", discusses the evolution of the concept of military necessity and recommends strongly "that in any revision of the 1954 Convention or in any new Additional Protocol to it, High Contracting Parties should renounce the provisions of Article 3(2) [13] allowing the waiving of the provisions of the Convention in the case of military necessity. Indeed, this should be seen as one of the highest priorities of the review process". [14]

In February 1994 a group of experts, invited in their personal capacities, put together the so-called Lauswolt document containing draft provisions aimed at improving the Convention. The Lauswolt document did not, however, deal with the problems raised by the notion of military necessity.

The second meeting of the High Contracting Parties to the 1954 Convention (Paris, 13 November 1995) invited all the States to submit to the Secretariat written comments on the substantive proposals for improving the Convention. Several replies commented on the military necessity issue. Some wished to remove completely the exception of military necessity (Croatia, the Czech Republic and Slovenia), others proposed modifications (Belgium, and an alternative proposal from the Czech Republic), still others suggested reconsidering the issue (Kuwait and Poland). [15]

The March 1997 meeting of governmental experts on the review of the Convention resulted in a redrafting of the Lauswolt document. The issue of military necessity was again barely mentioned in the revised text. It was, however, pointed out that "certain military legal advisers favoured including such a phrase in the new instrument because, according to their views, such a concept has been a part of international customary and treaty law of armed conflicts and the exclusion of this concept would not be accepted by their military. Those observers pointed out that there were close links between the 'military necessity' and the corresponding obligation not to use cultural property for military purposes" [16]. In particular, the Israeli observer suggested that the following provision be inserted in the new draft: "The provisions of this instrument shall not prejudice or derogate from accepted customary principles of the Laws of War, including, inter alia, the principles of proportionality, distinction and military necessity". [17]

During the third meeting of the States party to the Convention (Paris, 13 November 1997), representatives of several countries (e.g. Argentina, Austria, France and Israel) defended the value of this notion, asserting that it expressed one of the basic rules of international humanitarian law. They agreed, however, to define it more precisely and narrowly.

Finally, during the May 1998 (Vienna) meeting of governmental experts on the revision of the Convention the majority of participants speaking on this point favoured retaining the notion in the proposed new instrument. However, in accordance with the views expressed, its definition should include elements which would indicate the circumstances in which this exception to the obligation to protect cultural property may be invoked.

New definitions of "military necessity"

Following the May 1998 meeting, the Secretariat of UNESCO prepared a definition of the notion of "military necessity" for both situations mentioned in the 1954 Convention [18]. The definitions have the following characteristics.

a) Military necessity in respect of cultural property under general protection

1. Measures undertaken by a military commander to obtain, as quickly as possible, the complete surrender of the enemy must be lawful and in conformity with the generally recognized principles of international humanitarian law, both of treaty and customary nature, such as the distinction between combatants and non-combatants, proportionality and the prohibition of reprisals against protected categories of persons and objects.

2. Those actions must be limited as to the time, purpose and object of military operations.

3. No other feasible alternative was available at the moment of the operation.

4. The assessment of the situation by a commander was made from all sources reasonably available to him/her at the moment of the operation.

5. Imperative military necessity may be established only by the officer commanding a force the equivalent to a battalion unless the circumstances of the military engagement do not allow this.

6. If possible, a warning shall be communicated to the opposing party a reasonable time in advance.

b) Military necessity in respect of cultural property under *special protection*

In addition to the six conditions listed under a), the following two conditions must also be respected.

1. Unavoidable military necessity may be established only by the officer commanding a force equivalent to a division.

2. A warning shall be communicated to the opposing party in a reasonable time in advance.

The definition of “imperative military necessity” (applicable to cultural property under general protection) differs from that of “unavoidable military necessity” (in cases of special protection) in two respects: the rank of the military officer who may invoke the exception (battalion commander or division commander, respectively) and the obligation to give a warning prior to a military operation (recommended or obligatory, respectively) .

The new definitions were drawn up on the basis of the text and of the commentaries on the 1949 Geneva Conventions, their Additional Protocols of 1977 and other instruments of international humanitarian law. They were based on comments made at various stages of the review process by a number of delegations (e.g. Argentina, Austria, France, Germany, Israel and the Netherlands) and the ICRC.

Preparation of drafts for the Hague Diplomatic Conference of March 1999
The Preliminary Draft Second Protocol to the 1954 Hague Convention prepared by the Netherlands in cooperation with the UNESCO Secretariat, made use of the Secretariat’s definition of “military necessity” [19]. The Netherlands draft is stricter because it provided for obligatory warning in both cases and vested the responsibility for attacking cultural property under special protection in the national command level.

Following the submission of the Preliminary Draft for consideration to the States party to the 1954 Convention, States not party to that Convention and the international organizations concerned, the Secretariat received a number of substantial comments on the definition of “military necessity” applicable both to generally and to specially protected cultural property. Those comments were taken into account when the Secretariat prepared the Final Draft Second Protocol to the Convention for the Diplomatic Conference. [20]

The Final Draft contained a more precise definition than the Preliminary Draft of “military necessity” applicable to generally protected cultural property because it incorporated the clause of proportionality (Article 6 f). However, prior warning is no longer obligatory. As to the definition of “military necessity” applicable to cultural property under enhanced protection (a new category of protection combining the aspects of special protection under the Convention with criteria for the inclusion in the World Heritage List under the Convention concerning the Protection of the World Cultural and Natural Heritage, 1972), the new definition vests the responsibility to attack cultural property having lost enhanced protection in the highest level of government (Article 15 a) and incorporates the clause of proportionality (Article 15 f).

Discussions on this issue at the Hague Diplomatic Conference and its outcome
As during the 1954 Intergovernmental Conference, the notion of military necessity was one of the most hotly debated issues during the recent Diplomatic Conference which resulted in the adoption of the Second Protocol to the 1954 Convention (The Hague, 15-26 March 1999). Two opposing tendencies appeared, both during the plenary debates and in the working group on this matter: the attempt of military participants (both lawyers and operational staff) to broaden the scope of the definition of military necessity, and the attempt of cultural heritage protection experts to narrow the scope of this definition so as to limit potential abuses and loose interpretation.

The final text includes two provisions dealing with this issue: Article 6 (Respect for cultural property) related to generally protected cultural property, and Article 13 (Loss of enhanced protection) regarding cultural property under enhanced protection. [21]

How do these two provisions help develop the definition of "military necessity" ? In the author's opinion, Article 6 includes two new elements: first, the waiver of imperative military necessity in the case of transformation of cultural property into a military objective (Article 6 a (i)), and second, such waiver in case of use of cultural property for purposes likely to expose it to destruction or damage (Article 6 b) when such use is necessary for obtaining military advantage. The first provision concerns the attacker, while the second provision addresses the needs of the defending side. In addition, Article 6 a (i), which is based on Article 52, para. 2 of Additional Protocol I of 1977 to the Geneva Conventions, thus makes an important link between the new instrument and the definition of military objective under the 1977 Protocol.

Article 13, which *de facto* develops the definition of "unavoidable military necessity" under Article 11, para. 2 of the Convention, brings in the two new elements: the decision to attack that must be ordered at the highest operational level of command, and the obligation to give advance warning.

Before concluding this note on the meaning of "military necessity" in the 1954 Convention, it should be recalled that the notion appears in a number of other treaties on different aspects of the law of armed conflicts, such as the four 1949 Geneva Conventions (e.g. Art. 8, 34 and 50 of the First Convention; Art.126 of the Third Geneva Convention; Art. 49, 55, 108 and 143 of the Fourth Convention) and Additional Protocol I of 1977 (Art.54, para 5, 62, 67 and 71).

Let us conclude with the words of an acknowledged expert of the law of war: today, "military necessity is widely regarded as something that must be overcome or ignored if international humanitarian law is to develop, and its original role as a limit on military action has been forgotten. As a result, the principle has not been applied in new situations where it could serve as a significant legal restraint until more specific treaty rules or customs are established". [22]

Annex 1

Article XX — *Military necessity – general definition*
1. For the purpose of this instrument, military necessity represents an urgent situation obliging a military commander to take measures indispensable for forcing as quickly as possible the complete surrender of the enemy by means :
(a) indispensable for obtaining the military objectives which are lawful in accordance with the generally recognized principles of international humanitarian law, both of treaty and customary nature, such as the distinction between combatants and non-combatants, proportionality and the prohibition of reprisals against protected categories of persons and objects, and
(b) which are limited as to the time, purpose and object of military operations.

2. The application of the concept of military necessity shall be judged on the base of two conditions :
(a) no other feasible alternative was available at the moment of the conduct of hostilities, and
(b) the assessment of the situation by a commander was made from all sources reasonably available to him/her at the moment of the conduct of hostilities.

Article XX— *Military necessity in respect of cultural property under general protection*

1. For the purpose of the present instrument, imperative military necessity as referred to in Article 4, paragraph 2 of the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict means a situation referred to in Article ...

2. Imperative military necessity may be established only by the officer commanding a force the equivalent of a battalion unless the circumstances of a military engagement do not allow it and, if possible, a warning shall be communicated to the opposing Party in a reasonable time in advance.

Article XX — *Military necessity in respect of cultural property under special protection*
1. For the purpose of the present instrument, unavoidable military necessity as referred to in Article 11, paragraph 2 of the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict means a situation referred to in Article ...

2. Unavoidable military necessity may be established only by the officer commanding a force the equivalent of a division and a warning shall be communicated to the opposing Party in a reasonable time in advance.

Annex 2

[Article 3 — *Respect for cultural property*
6. The obligations in para. 1 and 2 may only be waived in the case of imperative military necessity under the following conditions :
a. only that degree of force may be applied that is not otherwise prohibited by the law of armed conflict and that is required for partial or complete submission of the enemy with a minimum expenditure of time, life and physical resources ;
b. warning is given to the opposing forces ;
c. a minimum time to redress the situation is given to the opposing forces ;
d. the decision to attack is taken on battalion level ;
e. no alternative means are reasonably available ;
f. means and methods are limited to those which are strictly necessary to counter the threat posed.]

Annex 3

Article 8 — Immunity of cultural property under special protection
3. In using force against cultural property under special protection in one of the exceptional cases mentioned in para. 2 the attacking forces shall only attack the property concerned if no alternative means are reasonably available and under the following conditions :
a. warning is given to the opposing forces ;
b. a minimum time to redress the situation is given to the opposing forces ;
c. the decision to attack is taken on national command level ;
d. means and methods are limited to those which are strictly necessary to counter the threat posed.

Annex 4

Article 6 — Conditions for military operations
An attack against cultural property which has lost its general protection according to Article 5 may only be undertaken on the following conditions :

a. the attack is ordered by an officer commanding a force equivalent to a battalion ;
b. where circumstances permit, a minimum time is given to the opposing forces to redress the situation ;
c. where circumstances permit an effective prior warning shall be communicated to the opposing forces ;
d. no other feasible alternative is available ;
e. the means and methods chosen are limited to those which are strictly necessary to counter the threat posed ; and
f. the damage caused is not excessive in relation to the concrete and direct military advantage anticipated from the attack.

Annex 5

Article 15 — Conditions for military operations
An attack against cultural property which has lost its enhanced special protection according to Article 14 may only be undertaken on the following conditions :
a. the attack is ordered by the highest level of government ;
b. a minimum time is given to the opposing forces to redress the situation ;
c. an effective prior warning is communicated to the opposing forces ;
d. no other feasible alternative is available ;
e. the means and methods chosen are limited to those which are strictly necessary to counter the threat posed ; and
f. the damage caused is not excessive in relation to the concrete and direct military advantage anticipated.

Annex 6

Article 6 — Respect for cultural property
With the goal of ensuring respect for cultural property in accordance with Article 4 of the Convention :
(a) a waiver on the basis of imperative military necessity pursuant to Article 4, paragraph 2, of the Convention may only be invoked to direct an act of hostility against cultural property when and for as long as :
(i) that cultural property has, by its function, been made into a military objective ; and
(ii) there is no feasible alternative available to obtain a similar military advantage to that offered by directing an act of hostility against that objective ;
(b) a waiver on the basis of imperative military necessity pursuant to Article 4 paragraph 2 of the Convention may only be invoked to use cultural property for purposes which are likely to expose it to destruction or damage when and for as long as no choice is possible between such use of the cultural property and another feasible method for obtaining a similar military advantage ;
(c) the decision to invoke imperative military necessity shall only be taken by an officer commanding a force the equivalent of a battalion in size or larger, or a force smaller in size where circumstances do not permit otherwise ;
(d) in case of an attack based on a decision taken in accordance with sub-paragraph (a), an effective advance warning shall be given whenever circumstances permit.

Annex 7

Article 13 — Loss of enhanced protection
1. Cultural property under enhanced protection shall only lose such protection :

(a) if such protection is suspended or cancelled in accordance with Article 14 ; or
(b) if, and for as long as, the property has, by its use, become a military objective.
2. In the circumstances of sub-paragraph 1(b), such property may only be the object of attack if :
(a) the attack is the only feasible means of terminating the use of the property referred to in sub-paragraph 1(b) ;
(b) all feasible precautions are taken in the choice of means and methods of attack, with a view to terminating such use and avoiding, or in any event minimising, damage to the cultural property ;
(c) unless circumstances do not permit, due to requirements of immediate self-defence :
(i) the attack is ordered at the highest operational level of com-mand ;
(ii) effective advance warning is issued to the opposing forces requiring the termination of the use referred to in sub-paragraph 1(b) ; and
(iii) reasonable time is given to the opposing forces to redress the situation.

Notes

1. 249 UNTS 240. Text available from UNESCO and on Internet (www.unesco.org/general/eng/legal/convent.html).

2. On the review process in general, see Jan Hladík, “The Review Process of the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict and its impact on international humanitarian law”, *Yearbook of International Humanitarian Law*, Vol. 1, T.M.C. Asser Press, 1998, pp. 313-322.

3. Article 4 - UNESCO Draft — *Obligations in respect of cultural property situated within the territory of another Contracting Party*
1. Each High Contracting Party undertakes to respect cultural property situated within the territory of another High Contracting Party, except in cases of imperative military necessity.

2. In particular, each Party undertakes not to use movable cultural property for purposes which might expose it to destruction or damage. It further undertakes not to remove or requisition movable cultural property or the material for its protection and to take the necessary measures to prevent or put a stop to any form of theft and any act of damage or destruction not justified by imperative military necessity.

Records of the Conference convened by the United Nations Educational, Scientific and Cultural Organization held at The Hague from
21 April to 14 May 1954, published by the Government of the Netherlands, The Hague, 1961, p. 374.

4. Article 11 - UNESCO Draft — *Withdrawal of immunity*

4. Subject to paragraph 1 of the present article, immunity shall be withdrawn from cultural property under special protection only in cases of unavoidable military necessity, and only for such time as that necessity continues. Such necessity can be established only by the staff of the large formation in charge of the operation concerned. Whenever circumstances permit, the opposing Party shall be notified, a reasonable time in advance, of the decision to withdraw immunity. *Ibid*., p. 381.

5. *Ibid*., p. 309.

6. *Ibid*.

7. *Ibid*., p. 310

8. Cuba, *ibid*., p. 151

9. United States of America, ibid., p. 141.

10. *Information on the implementation of the Convention for the Protection of Cultural Property in the Event of Armed Conflict (The Hague, 1954)*, 1995 Reports, UNESCO doc.
CLT- 95/WS/13, Paris, December 1995, p. 23.

11. *Review of the application of the Convention for the Protection of Cultural Property in the Event of Armed Conflict (The Hague, 1954)*, UNESCO doc. 140 EX/26, Paris, 11 September 1992, p. 6.

12. P. J. Boylan, *Review of the Convention for the Protection of Cultural Property in the Event of Armed Conflict (The Hague Convention of 1954)*, UNESCO doc. CLT-93/WS/12, Paris, 1993.

13. In fact, the author of the report means “Article 4, para. 2”. *J.H.*

14. Op. cit. (note 12), p. 57.

15. *Summary of comments received from States Parties to the Hague Convention and from the International Council on Archives,* UNESCO doc. CLT-96/CONF.603/INF.4, Paris, December 1996, pp. 2-4.

16. Meeting of governmental experts on *the review of the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict 1954,* UNESCO doc. CLT-96/CONF.603/5, Paris, 30 April 1997, p. 2.

17. *Draft provisions for the revision of the 1954 Hague Convention and commentary from the UNESCO Secretariat,* UNESCO doc. CLT-97/ CONF.208/2, Paris, October 1997, p. 3.

18. See text in Annex 1.

19. Preliminary Draft Second Protocol to the 1954 Hague Convention, HC/1999/1, October 1998, distributed by the Netherlands in preparation for the Diplomatic Conference to be held in the Netherlands in March 1999. See texts in Annexes 2 and 3.

20. *Draft Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict,* HC71999/1/rev.1, February 1999, distributed by the Netherlands. See Annexes 4 and 5.

21. See texts in Annexes 6 and 7.

22. B. M. Carnahan, “Lincoln, Lieber and the laws of war : The origins and limits of the principle of military necessity”, *American Journal of International Law*, Vol. 92, No. 2, April 1998,
p. 231.

New rules for the protection of cultural property in armed conflict
by Jean-Marie Henckaerts

The significance of the Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict

Alles van waarde is weerloos.[1]

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Contents

The 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict (hereafter: the 1954 Convention) is the paramount international instrument for the protection of cultural property during armed conflicts [2]. Cultural property includes museums, libraries, archives, archaeological sites and monuments of architecture, art or history, whether religious or secular. The 1954 Convention has to date been ratified by 95 States, but the basic principles concerning respect for cultural property enshrined in it have become part of customary international law. A Protocol dealing mainly with the protection of cultural property in occupied territory was adopted at the same time as the Convention, and 79 States are party thereto [3]. The specific content of the Convention will be explained in brief under each of the substantive sections of this article.

The effectiveness of the 1954 Convention became a subject of general concern in the early nineties, during the second Gulf War and the war in the former Yugoslavia. As this article goes to press, that effectiveness is sadly still being tested in the continued war in the Balkans.

In 1991, the Government of the Netherlands decided to include a review of the 1954 Convention as part of its contribution to the United Nations Decade of International Law. As a result, The Netherlands and the United Nations Educational, Scientific and Cultural Organization (UNESCO) jointly commissioned and funded "a review of the objectives and operation of the Convention and Protocol with a view to identifying measures for improving its application and effectiveness and to see whether some revision of the Convention itself might be needed, perhaps by means of an Additional Protocol" [4]. That review was published in 1993 by Professor Patrick Boylan.

In the following years, the Government of the Netherlands continued to be the driving force behind the review process, and three expert meetings were organized which resulted in the "Lauswolt document", named after the Dutch town where it was drafted. The Lauswolt document was a new draft treaty based on the findings of the Boylan review.

In March 1997, twenty government experts met at UNESCO headquarters in Paris to review the Lauswolt document. On the basis of their discussions, the UNESCO Secretariat drew up a revised Lauswolt document which it submitted to all States party to the 1954 Convention at a meeting in Paris on 13 November 1997. It was decided that a final preparatory meeting would be convened to discuss certain legal questions further, and the proposal by the Netherlands to convene a diplomatic conference in 1999 to transform the Lauswolt document into an international treaty was welcomed.

The final preparatory meeting was hosted in Vienna in May 1998 by the Austrian Government. The meeting identified five main areas that needed to be addressed in the Second Protocol :

- the exception of military,
- precautionary measures,
- the system of special protection,
- individual criminal responsibility,
- institutional aspects.

After the meeting, a Preliminary Draft Second Protocol to the 1954 Convention was drawn up [5]. States and relevant organizations were invited to submit comments on the draft, in particular with respect to the five areas mentioned above [6]. On the basis of those comments, the UNESCO Secretariat and the Government of the Netherlands together drew up the final draft Second Protocol [7].

The Diplomatic Conference on the Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict took place in The Hague from 15 to 26 March 1999. On 26 March 1999, the Conference adopted the Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict (hereafter : the Second Protocol) without a vote [8]. It was opened for signature in The Hague on 17 May 1999 in the framework of the Centennial celebrations of the First International Peace Conference and signed by 27 States on that date. It remains open for signature at the Hague until 31 December 1999.

The Second Protocol is additional to the 1954 Convention, which remains the basic text. A State can only become a party to the Second Protocol if it has ratified the 1954 Convention. During the entire review process, four options were kept open regarding the treaty technique to be used for improving the 1954 Convention. The first consisted in amending the 1954 Hague Convention; however, any amendments would have required unanimous adoption by all States party to the Convention [9]. Since this was virtually impossible, this option was discarded even though some States had supported it. The second option consisted in the adoption of a new, separate convention. This would have required substantial negotiations and would have had the disadvantage of creating two separate systems. As a result, this option was never really considered.

The third option consisted in the adoption of a Protocol aimed at revising the 1954 Convention. Several delegations strongly advocated this option, but because unanimity would again have been required, it was rejected by the majority of delegations. In the end, the fourth option prevailed, namely that the new treaty would be an additional protocol which would in no way amend the 1954 Convention but would supplement it and would only apply to the States who ratified it. The 1977 Protocols additional to the 1949 Geneva Conventions served as a useful precedent. As a result, every effort was made to make sure that each provision of the Second Protocol was indeed additional to the 1954 Convention.

The purpose of this article is to highlight the major developments embodied in the Second Protocol and to mention certain points of common understanding that were acknowledged at the Diplomatic Conference but not reflected as such in the text of the Protocol itself nor in the Conference's Final Act.

Peacetime measures

Pursuant to Article 3 of the 1954 Convention, States undertake to prepare in time of peace for the safeguarding of cultural property against the foreseeable effects of an armed conflict "by taking such measures as they consider appropriate". But the Convention does not provide any further details on measures States should take.

The Second Protocol aims to provide more guidance in this respect, as it provides specific examples of concrete measures to be taken in time of peace : [10]

- the preparation of inventories,
- the planning of emergency measures for protection against fire or structural collapse,
- the preparation for the removal of movable cultural property or the provision of adequate in situ protection of such property,
- the designation of competent authorities responsible for the safeguarding of cultural property.

These measures are of great practical importance for the protection of cultural property in the event of armed conflict.
Clearly, they also require financial resources and know-how. With these requirements in mind, the Second Protocol provides for the setting up of a Fund for

the protection of cultural property in the event of armed conflict [11]. The Fund was specifically established to provide financial or other assistance in support of preparatory or other measures to be taken in peacetime. It will be managed by the Committee for the Protection of Cultural Property in the Event of Armed Conflict, which is to be set up pursuant to the Second Protocol [12]. The resources of the Fund shall consist inter alia of voluntary contributions made by States party to the Second Protocol [13]. Some States had sought the inclusion of compulsory contributions, but in the end that proposal was rejected.

In addition, the Second Protocol expands on the rather general provision concerning dissemination contained in the 1954 Convention [14]. Again, specific examples of concrete dissemination measures are listed, especially for the military and civilian authorities who assume responsibilities with respect to the application of the Second Protocol. They are to be fully acquainted with the Protocol, and to that end States party shall, as appropriate : [15]

> incorporate guidelines and instructions on the protection of cultural property in their military regulations,
>
> develop and implement, in cooperation with UNESCO and relevant governmental and non-governmental organizations, peacetime training and educational programmes,
>
> communicate to one another, through the Director-General of UNESCO, information on laws, administrative provisions and measures taken under the preceding paragraphs,
>
> communicate to one another, as soon as possible, through the Director-General, the laws and administrative provisions which they may adopt to ensure the application of the Protocol.

The experience of the International Committee of the Red Cross provides ample evidence of the essential role of dissemination when it comes to ensuring respect for international humanitarian law.

Respect for cultural property

A. All cultural property

Article 4 of the 1954 Convention provides that cultural property shall not be subject to any act of hostility nor used for purposes which are likely to expose it to destruction or damage in the event of armed conflict. It immediately adds, however, that both obligations may be waived in case of “imperative military necessity”. Professor Boylan’s review identified the lack of a clear definition of this exception as a serious weakness with respect to the basic principle of protection contained in the 1954 Convention. [16]

Although the origins of the principle of military necessity can be traced back to the Lieber Code [17], the restriction of imperative military necessity was first codified in international law in the 1907 Hague Regulations limiting the destruction or seizure of the enemy’s property to that which was imperatively demanded by the necessities of war [18]. The 1954 Convention borrowed this notion as there were few other established limits applicable to the conduct of hostilities. [19]

As history shows, however, the concept of military necessity has not limited warfare in any significant way. The Second World War, for example, was fought under the restriction that no property could be destroyed unless there was an imperative military necessity to do so. Yet entire cities were destroyed.

It appears that the notion of imperative military necessity is too vague to constitute an effective limitation on warfare. Even military lawyers at the Diplomatic Conference admitted that it was difficult to teach their troops how to interpret and work with the concept. In general, matters left to discretionary clauses based on military necessity are those which could not be regulated; and matters which are not regulated provide a field for the law to develop. In order to do so, the military philosophy behind the maxim “Have confidence in the wisdom of the generals” [20] had to be replaced with objective criteria that were binding on the military. The goal of the Diplomatic Conference was to give a content to the notion of imperative military necessity with a view to enhancing its meaning and effect.

Imperative military necessity to commit acts of hostility

Limiting attacks to military objectives would in large part achieve that goal. One should not forget that the 1954 Convention was adopted well before the 1977 Protocols additional to the 1949 Geneva Conventions. It was drafted against the background of the Second World War, at a time when it was still considered acceptable that entire cities would be attacked. In the midst of such a war, the 1954 Convention sought to protect valuable cultural property.

In 1977, the Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) did away with this approach [21]. Henceforth, only military objectives — more clearly defined and more carefully selected — were to be made the object of attack. Civilians and civilian objects were not to be made the object of a direct attack. This approach is a clear example of how international humanitarian law balances military necessity and humanitarian needs : it allows attacks that are necessary but establishes strict humanitarian limits.

It was therefore obvious that any improvement of the 1954 Convention should reflect this modern approach : cultural property is generally civilian property and as such should not be attacked; it may be atacked only if and when it becomes a military objective. This approach also has the advantage of providing a clearer answer to the question of when cultural property may be attacked.

The definition of military objective in Article 52(2) of Additional Protocol I was one of the major achievements of the Diplomatic Conference on the Reaffirmation and Development of International Humanitarian Law Applicable in Armed Conflicts (CDDH), which was convened by the Swiss Government in 1974 and adopted Additional Protocol I on 8 June 1977. States not party to Additional Protocol I, such as the United States, Turkey and India, confirmed the customary law nature of this provision during the 1999 Diplomatic Conference that adopted the Second Protocol. This illustrates how the Diplomatic Conference also sought to reaffirm certain rules of humanitarian law while developing others.

The definition of military objective contains two criteria which have to be fulfilled cumulatively before objects can be destroyed, captured or neutralized. They deal with the nature, location, purpose or use of objects and with the military advantage to be gained by destroying, capturing or neutralizing them. The nature, location, purpose or use of the object has to be such that it makes an “effective contribution to military action”. The military advantage has to be “definite, in the circumstances ruling at the time”. These criteria were as clear as it was possible to negotiate during the CDDH and they are fairly strict.

As such, the notion of military objective incorporates the idea of military necessity. Once an object has become a military objective it can be destroyed, captured or neutralized, subject to certain exceptions. This simple rule recognizes the military necessity of attacking certain objects during war. By limiting those objects to those which are military objectives it incorporates the notion that war has limits. As a result, the concept of military objective embodies the balance that humanitarian law establishes between military interests and humanitarian concerns.

The requirement of the 1954 Convention that the military necessity has to be "imperative" is made sufficiently clear in Article 4 of the Second Protocol by the second condition, namely that no other alternative is available. Military necessity could therefore virtually never be invoked to justify an attack on cultural property standing in the way of an advancing army, as there are almost always alternatives to circumvent the property. This means that when there is a choice between several military objectives and one of them is a cultural property, the latter shall not be attacked. In fact, this provision adds cultural property to the military objectives which, under Article 57(3) of Protocol I, should not be attacked. [22]

The protection of cultural property is enhanced in that the concept of military objective — so widely recognized and used that it has become part of customary international law — is used to define the exception of military necessity. The rule that only military objectives can be targeted is now part and parcel of military manuals and military training worldwide. As many delegates stated at the Diplomatic Conference, it is important to have a simple text which is easy to use and to teach. The concept of military objective fulfils these requirements far better than the vague notion of military necessity.

The final text of Article 4 of the Second Protocol is based on proposals submitted by Austria and the ICRC. The Austrian proposal read: "Imperative military necessity under Article 4, paragraph 2 of the Convention may only be invoked when there is no other feasible alternative for fulfilling the mission and for as long as the reasons for its invocation prevail". The ICRC proposal read : "Objects constituting cultural property lose their general protection from the moment they become military objectives, i.e. when they are used to make an effective contribution to military action and when their total or partial destruction, capture or neutralization offers a definite military advantage in the circumstances ruling at the time".

A Working Group on Chapter 2 was set up under the chairmanship of Austria. Its task was to combine both proposals as the delegates felt both had merit and were in fact complementary. The Austrian proposal sought to define the "imperative" character of military necessity whereas the ICRC proposal sought to use the concept of military objective to give content to the principle of military necessity. A criticism of the ICRC proposal was that it singled out the use of cultural property that could make an effective contribution to military action, whereas Article 52(2) of Additional Protocol I specifies that the nature, location, purpose or use of objects can make an effective contribution to military action. Many delegates, mostly from NATO countries, observed that any definition of military objective had to correspond exactly to the definition given in Article 52(2) of Protocol I.

As a result, the Working Group decided to provide a definition of military objective at the beginning of the Protocol, while Article 4 would limit acts of hostility against cultural property to property "which, by its use, has become a military objective". But even in the Working Group several delegations expressed concern about the restriction "by its use", whereby cultural property could become a military objective by its use only and not by its location, for example. When the draft prepared by the Working Group on Chapter 2 came back to the plenary, the issue of use and location was clearly too controversial and the text was not acceptable to a significant number of delegations.

The Egyptian and Greek delegations were the most active in supporting the restriction whereby cultural property could become a military objective by its use only. The argument was that cultural property which was not used in any way for military action should never be the object of attack. If mere location could turn a cultural property into a military objective, the protection of cultural property would be greatly diminished. Some positive action should be required from the holder of the property before it could become a military objective. The ICRC supported this approach.

Since it was agreed that the nature and purpose of cultural property could never turn it into a military objective, the entire debate centered around the issue of location. The ICRC Commentary to 1977 Protocol I notes that the Working Group of Committee III introduced the location criterion without giving reasons [23]. The same thing could be said of the Second Protocol. No real reasons were given why location had to be included.

One example commonly cited at the Diplomatic Conference was that of historic bridges. This example is misleading, however, because it is really the use of such bridges that can make an effective contribution to military action.

The Canadian delegation offered another specific example : the retreat of troops could be blocked by a historic wall and there might be no way around the wall if it was located in a valley or a mountain pass. To go around the wall would take too much time, and the commander would therefore either have to take casualties or break through the wall. In such case, the historic wall would not be used for military action and would become a military objective merely because of its location. This example does not seem realistic as such walls are not usually built in valleys or mountain passes. The need for the criterion of location was not well explained, yet several delegations, mostly from NATO countries, strongly insisted on it.

The ICRC Commentary on Additional Protocol I gives the following examples of objects which by virtue of their location make an effective contribution to military action : a bridge or other construction or a site which is of special importance for military operations in view of its location, either because it is a site that must be seized or because it is important to prevent the enemy from seizing it, or otherwise because it is a matter of forcing the enemy to retreat from it. [24]

As mentioned above with respect to historic bridges, it is really the use of a construction or site that turns it into a military objective. With regard to sites that must be seized because of their location, the question arose at the CDDH what the situation would be if a belligerent in a combat area wished to prevent the enemy army from establishing itself in a particular area or from passing through that area, for example, by means of barrage fire [25]. There can be little doubt, according to the Commentary, that in such a case the area must be considered as a military objective and treated as such [26]. Of course, such a situation could only concern limited areas and not vast stretches of territory. It applies primarily to narrow passages, bridgeheads or strategic points such as hills or mountain passes. [27]

None of these examples constitute convincing evidence of the need to target cultural property because of its location. There is convincing legal evidence, on the other hand, to say that what turns cultural property into a military objective is ultimately its use. In 1907, Article 27 of the Regulations Respecting the Laws and Customs of War on Land already stipulated that “in sieges and bombardments all necessary steps must be taken to spare, as far as possible, buildings dedicated to religion, art, science, or charitable purposes, historic monuments, hospitals, and places where the sick and wounded are collected, provided they are not being used at the time for military purposes” (emphasis added). This text confirms that it is their use which makes these objects lose their protection.

The ICRC Commentary on Article 53 of Additional Protocol I confirms this view. Article 53 prohibits the use of cultural property in support of the military effort [28]. The Commentary notes that “if protected objects were used in support of the military effort, this would obviously constitute a violation of Article 53 of the Protocol, though it would not necessarily justify attacking them. To the extent that it is admitted that the right to do so does exist with regard to objects of exceptional value, such a right would depend on their being a military objective, or not, as defined in Article 52, paragraph 2” [29]. For example, “it is not permitted to destroy a cultural object whose use does not make any contribution to military action, nor a cultural object which has temporarily served as a refuge for combatants, but is no longer used as such”. [30]

As a compromise, the sentence “which, by their use, have become military objects” was changed to “which, by their function, have been made into military objects” in the Second Protocol. This represents a twofold change. First, the word “use” was replaced by “function”, which does not appear in the definition of a military objective. Secondly, “become” was replaced by the words “been made into”.

With regard to the new text, there was a clear understanding that the word “function” referred at the same time to something that was in fact functioning. For example, an old fortification which was not functioning as a fortification could not be considered a military objective. In addition, the new text sought to convey the requirement of an active role on the part of the holder of the cultural property in that the holder made the property into a military objective. This could only happen through use.

It is only by a stretch of imagination that function could cover location: the example of the historic wall blocking retreating soldiers could fall under the new text in that the circumstances make the wall, which functions to block a retreat, into a military objective. But in real life this is not the problem faced by cultural property on the battlefield. In real life the problem is that cultural property is attacked even when it is not used for any military action or is attacked indiscriminately. In real life the rule should be simple : cultural property which is not used to make an effective contribution to military action and whose destruction, seizure or neutralization does not offer a definite military advantage cannot be attacked. It is difficult to imagine how military commanders could teach their soldiers anything else.

It s remarkable that military lawyers who call for texts that are simple to teach and apply argue at such length about a minor difference that will be difficult to apply and teach. The reason why some delegates strongly argued for use only was clear. The mere location of pyramids in Egypt or temples on Greek islands should never serve as a pretext to attack those objects. The insistence on changing use to function is difficult to understand if the only example that could be given was that of an ancient wall blocking a pass. This example could easily have been dealt with under the exception of the prohibition on use of cultural property, thus leaving the overall system consistent, clear and simple. It is to be hoped that it will be taught and applied in that way.

Imperative military necessity to use cultural property
The 1954 Convention also allows the use of cultural property for military action if such use is required for reasons of imperative military necessity. The same problem as explained above applies to the exception with respect to use of cultural property : the content of the exception is not very clear and the protection of cultural property would be enhanced by greater precision.

An absolute prohibition of the use of cultural property for military action is difficult to imagine, as there may indeed be situations in which the military need to avail themselves of cultural property for good reason. A classic example is the case of retreating troops who need to take shelter in a cultural property for defence purposes. Because the exception is limited to cases of “imperative” military necessity, such use can only be made when there is no alternative available. Hence, the Second Protocol provides that a waiver on the basis of imperative military necessity may only be invoked to use cultural property for military action “when and for as long as no choice is possible between such use of the cultural property and another feasible method for obtaining a similar military advantage”.[31]

Finally, it should be noted that the decision to attack or use cultural property on the basis of the exceptions explained above shall only be taken by an officer commanding a force equivalent to a battalion or a smaller force where circumstances do not permit otherwise. [32]

B. Cultural property under enhanced protection
The 1954 Convention establishes a system of special protection. This system was designed for a limited number of refuges intended to shelter movable cultural property, centres containing monuments and other immovable cultural property of very great importance [33]. Special protection is granted by entry in the International Register of Cultural Property under Special Protection [34]. The system is intended to safeguard cultural property like the Versailles Palace in France or the Taj Mahal in India.

Unfortunately, the system of special protection has had very limited success. Only one centre containing monuments and eight refuges have been listed in the Register.35 As three refuges were withdrawn from the list in 1994, only one centre containing monuments and five refuges remain. There are a number of reasons why so few objects have been listed. The first is that entry in the list is conditional on the property being situated at an adequate distance from any large industrial centre or from any important military objective [36]. In many cases it is almost impossible to fulfil this condition as so much valuable cultural property is located in the heart of cities surrounded by potential military objectives. In addition, there is no agreement on what constitutes an adequate distance and, as a result, it is difficult to prepare an application for entry or to judge a request. This is yet another indication that the 1954 Convention was adopted well before the developments in humanitarian law reflected in the 1977 Additional Protocols and well before the technological evolution that has lead to means and methods of warfare that allow for more accurate targeting.

Political motivations have also stood in the way of registration. States can object to the entry in the Register and have done so on grounds such as the fact that the requesting authority was not the legitimate representative of the country in question. [37]

As a result, the Second Protocol has done away with the distance criterion and has strictly limited the possibility of lodging objections. Under the new system, three criteria have to be met in order for an object to be listed in the newly established List of Cultural Property under Enhanced Protection (the List) : [38]

the object must be a cultural heritage of the greatest importance for humanity ;

it must be protected by adequate domestic legal and administrative measures recognising its exceptional cultural and historic value and ensuring the highest level of protection ;

it must not be used for military purposes or to shield military sites and a declaration must have been made by the Party which has control over the cultural property, confirming that it will not be so used.

A decision to grant or deny enhanced protection may only be made on the basis of those criteria. In addition, objections against such grant shall be specific and related to facts [39]. This is a clear response to the shortcomings of the previous system.

The fact that the World Heritage List established under the 1972 Paris Convention concerning the protection of the world cultural and natural heritage is widely used — 582 sites are listed — constituted an incentive to try and make the International Register of Cultural Property under Special Protection work. But past efforts showed that this could only happen if the conditions and procedures were adjusted to redress previous shortcomings [40]. The usefulness of such a list lies in its world-wide renown: its mere existence should constitute an effective tool of prevention and protection. UNESCO would remind warring parties of the list and point out that any military use of or attack against any property on the list would constitute a serious war crime (see below). The commission of such acts would also have severe negative political implications. When no wartime list was available, as in the case of the attacks on Dubrovnik, UNESCO availed itself of the World Heritage List, which had not necessarily been established for wartime purposes. As a result, Dubrovnik was more or less spared. This example has strengthened the conviction that it would be useful to have a list of exceptionally valuable cultural property to be protected in time of armed conflict. This conviction was clearly articulated by the States represented at the Preparatory Meeting in Vienna in May 1998.

As the Second Protocol is additional to the 1954 Convention, and does not amend it, the existing system of special protection could not be touched and an entirely new system had to be established. As the existing system has had only very limited success, the intention is clearly to start using the new system. States wanting to register any property should start using the new List of Cultural Property under Enhanced Protection established by the Second Protocol, and States that have registered property in the previous list should request a transfer to the new list.

The fact that a new system had to be set up also explains why a new name had to be used. Continued use of the designation “special protection” would have implied an amendment of the existing special protection system. As the Protocol was clearly supplementary, a new name had to be used and a separate and new system had to be set up.

Under the 1954 Convention special protection consists of the fact that the immunity of such property can only be withdrawn “in exceptional cases of unavoidable military necessity” [41]. The wording implied a stricter standard than for other cultural property, where a waiver on the basis of “imperative military necessity” was in place. In practice, however, it was not clear what “exceptional cases of unavoidable military necessity” were.

The Second Protocol has clarified the law by establishing more clearly when cultural property under enhanced protection loses its protection, namely “if, and for as long as, the property has, *by its use*, become a military objective”, and an “attack is the only feasible means of terminating the use of the property” that made it a military objective. [42]

Loss of enhanced protection is conditional on use of the cultural property so that it becomes a military objective.“Use” was not replaced by “function” as was the case for the general protection system for all cultural property, on the strength of the argument that the *quid pro quo* of enhanced protection was non-use in exchange for enhanced protection. As indicated above, one of the conditions for registration of cultural property for enhanced protection is abstention from its use for military purposes and a declaration confirming that it will not be so used. The argument was that since there is a promise not to use, enhanced protection can only be lost through use. It was further argued that limiting loss of protection for cultural property under enhanced protection to instances of use only was an essential part of the “enhanced” level of protection offered by enhanced protection system. This argument is, however, mistaken.

A common misunderstanding is that there is a difference in the levels of protection afforded cultural property under general and enhanced protection — and the names indeed do suggest that such a difference exists. But there is, in fact, no lower or higher level of protection. The basic protection is the same : the object cannot be destroyed, captured or neutralized. Once protection is lost, it is lost for good : “you use, you lose”. There are minor differences in the level of command at which an attack has to be ordered, the warning to be given and the requirement that a reasonable time be given to the opposing forces to redress the situation (see below), but these differences do not change the basic loss of protection.

There is no difference in the level of protection and there is no need to differentiate between two different ways in which cultural property can become a military objective. What is the difference then between enhanced protection and general protection ? The main difference lies not in the obligations of the attacker but in the obligations of the holder of the cultural property. In the case of general protection, the holder of the property has the right, if need be, to convert the property into a military objective, by using it for military action. In the case of enhanced protection, the holder of the property has absolutely no right ever to convert the property into a military objective by using it for military action. Registration on the List therefore requires the State party seriously to study whether it would ever be in need of that property for military purposes and to answer in the negative.

Using property on the List for military purposes would amount to a serious violation of the Second Protocol, and the offender would be liable to criminal sanction as a war criminal (see below). The term “enhanced protection” is therefore misleading. The essence of the system is that it concerns some form of “registered” or “certified protection”. The holder of the property registers or certifies his promise that the property will never be used for military purposes. As a result, the property can never become the object of an attack. The advantage of putting property on the List is that an adversary will be particularly aware of it and any attack on the property will have serious consequences for the perpetrator (see below).

The registration of an object on the List of Cultural Property under Enhanced Protection can be compared to an internationally recognized declaration establishing a non-defended locality [43]. It is best to make such declaration in peacetime as it guarantees that everything is in place if and when an armed conflict breaks out.

Conditions for attack

A. All cultural property

Once cultural property has, by its function, become a military objective and there is no feasible alternative, it has lost its protection against attack. Yet the Second Protocol adds a further condition for attack, providing for an extra level of protection for cultural property which has thus become a military objective, beyond the protection enjoyed by all civilian objects. In case of attack, an effective advance warning shall be given whenever circumstances permit [44]. This duty did not exist under the 1954 Convention. The duty to issue an effective advance warning also exists for attacks which may affect the civilian population [45]. This demonstrates how the protection of cultural property in some respects approximates the protection of the civilian population as such and goes beyond the protection of other civilian objects.

In addition, an attack can only be ordered by an officer commanding a force equivalent to a battalion or a smaller force where circumstances do not permit otherwise. [46]

B. Cultural property under enhanced protection

Under the 1954 Convention, an attack on cultural property under special protection can only be ordered by “an officer commanding a force the equivalent of a division in size or larger and whenever circumstances permit, the opposing Party shall be notified, a reasonable time in advance, of the decision to attack”.[47]

The Second Protocol seeks to tighten these conditions, but an effort to change the relative duty of notice into an absolute duty and a concomitant effort, supported by the ICRC, to have the decision to attack taken at the highest level of government failed. It would indeed make sense to have the decision taken at the highest level of government because of the political implications thereof. Several delegates, however, argued against this proposal. While they recognized that in some countries such a decision would probably be taken at the highest level of government, for example if the Head of State is the Commander-in-Chief of the armed forces, they felt that the political structures of countries around the world were too diverse to impose such an obligation. Hence, the Second Protocol requires that an attack be ordered at the highest operational level of command.

In addition, a proposal to make it an absolute obligation to order the attack at such level, to give effective advance warning and to give reasonable time to the opposing forces to redress the situation, was rejected. Several delegates argued that if their troops came under fire from cultural property under enhanced protection they would deem it excessive to have to comply with those conditions without being able to return fire immediately. Hence, the three obligations are waived if circumstances do not permit “due to requirements of immediate self-defence” [48]. This still represents progress over the 1954 Convention, as the level at which the attack has to be ordered is much higher and as the vague “whenever circumstances permit” has been narrowed considerably. In addition, the requirement that a reasonable time be given to the opposing forces to redress the situation is new and adds an extra layer of protection.

An earlier ICRC proposal to approximate the protection of cultural property under enhanced protection to that given to medical units was not considered. Under Article

21 of the 1949 Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, the protection to which medical units are entitled shall not cease “unless they are used to commit, outside their humanitarian duties, acts harmful to the enemy. Protection may, however, cease only after a due warning has been given, naming, in all appropriate cases, a reasonable time limit and after such warning has remained unheeded”. It was felt that hospitals deserved an exceptional level of protection, beyond that enjoyed by other civilian objects.

Precautions in attack

By introducing the notion of military objective, other rules on the conduct of hostilities contained in Additional Protocol I of 1977 could also be included. The Second Protocol therefore incorporates the rules contained in Article 57 of Protocol I and applies them specifically to cultural property. In fact, Article 57 already covers cultural property, as it applies to civilian objects and all cultural property is, in principle, civilian in nature. Nevertheless, it was deemed useful to reaffirm those rules and to spell them out more clearly with respect to cultural property in particular.

Precautions against the effect of hostilities

The same can be said of Article 58 of Additional Protocol I dealing with precautions against the effects of attacks, the so-called passive precautions to be taken by the defender (in parallel with the active precautions to be taken by the attacker). Article 8 of the Second Protocol applies the rules contained in Article 58 of Protocol I in a way appropriate for cultural property.

Individual criminal responsibility

Article 28 of the 1954 Convention requires States “to take, within the framework of their ordinary jurisdiction, all necessary steps to prosecute and impose penal or disciplinary sanctions upon those persons, of whatever nationality, who commit or order to be committed a breach of the [...] Convention”.[49]

This provision has largely remained a dead letter, mainly because it does not list the violations which require a criminal sanction. The experience of the ICRC Advisory Service on International Humanitarian Law proves that such a list is essential if a coherent and complete system of criminal repression of war crimes is to be instituted worldwide.

This is one of the main areas in which the Second Protocol clarifies and develops humanitarian law with respect to cultural property. Building on Additional Protocol I and the Rome Statute of the International Criminal Court, Article 15 defines five acts which constitute serious violations requiring a criminal sanction if committed intentionally and in violation of the 1954 Convention or the Second Protocol :

> making cultural property under enhanced protection the object of attack,
>
> using cultural property under enhanced protection or its immediate surroundings in support of military action,
>
> extensive destruction or appropriation of cultural property protected under the Convention and [the Second] Protocol,

making cultural property protected under the Convention and [the Second] Protocol the object of attack,

theft, pillage or misappropriation of, or acts of vandalism directed against, cultural property protected under the Convention.

But the definition of serious violations is not in itself sufficient to ensure that persons committing such violations are actually punished. To achieve this would still require effective enforcement at the national level. In order to arrive at effective national enforcement, implementing legislation has to be adopted covering two aspects : (a) criminalizing violations, and (b) establishing jurisdiction to try or extradite.

Criminalizing violations

As far as the need to criminalize violations under domestic law is concerned, States have the specific duty, under the Second Protocol, to adopt whatever measures are necessary to establish the abovementioned five serious violations as criminal offences under their domestic law and to make the offences punishable by appropriate penalties. Such legislation would ensure that the prohibition to commit any of the serious violations of the Second Protocol is, in practice, enforced.

With regard to the issues of auxiliary crimes (e.g. aiding and abetting), command responsibility and defences, the original proposal to set out these rules was discarded in favor of an obligation to comply with general principles of law and international law in this respect [50]. These rules have been authoritatively restated in the Rome Statute of the International Criminal Court, and many delegates felt there was no need to repeat them in a “mini criminal code”.

Jurisdiction

The list of serious violations is based on proposals submitted by Austria and the ICRC to the Working Group on Chapter 4. This explains why it contains two types of violations.

a) The first three violations correspond to what are called “grave breaches” under the Geneva Conventions and Additional Protocol I, and are based on a proposal by Austria. States have a duty to try or extradite anyone charged with having committed any of these violations on the basis of universal jurisdiction. Specific and detailed provisions regulate the prosecution and extradition of offenders [51]. According to the Chairman of the Working Group, from the point of view of international criminal law, these provisions are a major achievement as all elements to form a coherent system of prosecution and extradition are included. [52]

With respect to the specific violations included in this category, it is interesting to note that the first two violations concern cultural property under enhanced protection, and that both an attack on and the use of such property are established as serious violations. Under Protocol I of 1977, only an attack on such property is defined as a grave breach and only in so far as it causes extensive destruction [53]. The Second Protocol establishes a balance between the criminal responsibility of both the attacker and the defender.

A proposal by the delegate from China to prohibit collateral damage to cultural property under enhanced protection was not acted upon. This would have been a significant improvement of the existing system. Since the Second Protocol requires parties to a conflict to refrain from any use of such property or its immediate surroundings in support of military action, such a rule could have fitted into the Second Protocol.

The third serious violation concerns the destruction or appropriation of all cultural property, but the extensive nature of such acts make them serious violations on a par with grave breaches.

States have to establish universal jurisdiction over such violations. This means they have to establish jurisdiction not only when the offence is committed in the territory of the State or when the alleged offender is a national of the State, but also when the offence is committed abroad by a non-national [54]. This reflects the principle of mandatory universal jurisdiction for grave breaches, which implies that all States have to establish jurisdiction to try or extradite non-nationals for war crimes committed abroad who are present in their territory.

At the request of the United States, a provision was included that excludes nationals of States not party to the Second Protocol from the regime of mandatory universal jurisdiction [55]. This would mean that States have no obligation to try or extradite such persons. The extent of this exception is greatly diminished, however, by the acknowledgement that States may establish jurisdiction over such persons under applicable national or international law, including customary international law [56], by the statement of the Chairman of the Working Group on Chapter 4 that nothing in the Second Protocol in any way limits the ability of States to legislate, criminalize or otherwise deal with any offence under the Protocol [57], and by the fact that the entire jurisdictional regime is without prejudice to Article 28 of the 1954 Convention. [58]

Article 28 of the 1954 Convention was in fact already intended to provide for mandatory universal jurisdiction. According to Toman, "[t]he representative of one government raised the question of whether a Party to the Convention was obliged to prosecute and impose penal sanctions upon persons having committed breaches outside the territory subject to the criminal jurisdiction of the State in question. The answer is yes, because that is the aim of this provision. It may reasonably be assumed that the country has at its disposal general legislation concerning the protection of its own cultural property and that the criminal act directed against that property would, in any event, be covered by those provisions. What remains to be done — according to Article 28 of the Convention — *is to prosecute those who have committed criminal acts outside the territorial jurisdiction of the State*". [59]

b) The last two serious violations were added to the list at the suggestion of the ICRC. The reason for this was that these acts had been recognized as war crimes subject to criminal sanction in the Rome Statute of the International Criminal Court. As such, they could not be included in a general provision on "other violations" which would only require States to suppress such acts without specifying the means of doing so. As indicated above, the experience of the ICRC has shown that the vagueness of the category of "other violations" makes it very difficult to convince States that certain of those other violations are indeed war crimes which have to be penalized with a criminal sanction under domestic law.

These two serious violations amount to war crimes, but States only have the obligation to repress them by criminal sanctions using the most common grounds for jurisdiction, namely when the offence is committed in the territory of the State or when the alleged offender is a national of the State. There is no obligation to establish jurisdiction over cases where the alleged offence was committed abroad by a non-national, although States may exercise such jurisdiction [60]. This reflects the principle of permissive universal jurisdiction for war crimes, according to which all States have jurisdiction to try non-nationals for war crimes committed abroad but are under no obligation to do so if the crimes do not amount to grave breaches. This also follows clearly from the acknowledgement that States may establish jurisdiction over such persons under applicable national or international law, including customary international law [61], and from the statement by the Chairman of the Working Group on Chapter 4, referred to above, that nothing in the Protocol limits in any way the ability of the State to legislate, criminalize or otherwise deal with any of the serious violations of the Protocol. [62]

The scope of application

The Second Protocol applies equally to international and non-international armed conflicts [63]. The extension of the application of the Second Protocol to non-international armed conflicts is essential. Most modern armed conflicts are non-international, and history has shown that the protection of cultural property in such conflicts can be problematic.

Furthermore, developments since the adoption of the Hague Convention in 1954 should not be forgotten. Additional Protocol I establishes a coherent system of criminal repression but only as far as international armed conflicts are concerned. It is of particular importance, as a result, that the entire Second Protocol, including the section on criminal repression, apply to non-international armed conflicts. This reflects the modern tendency of legislation, for example, no longer to distinguish between international and non-international armed conflict when it comes to repression of violations of international humanitarian law. In addition, under its Statute, the International Criminal Court has jurisdiction over war crimes committed against cultural property in both international and non-international armed conflict.

At the request of China and India, a phrase was added to the effect that nothing in the Protocol shall prejudice “the primary jurisdiction” of a State in whose territory a non-international armed conflict occurs over the serious violations of the Protocol. This means, in reality, that the territorial State has the primary responsibility to exercise jurisdiction over such violations: to investigate, prosecute and punish the offenders. It clearly implies, however, that if such jurisdiction is not exercised, jurisdiction may be exercised by other States or by international criminal tribunals with the competence to do so.

Although Article 22 of the Second Protocol does not spell it out as clearly as it could have, the Protocol applies to all parties to a non-international armed conflict, whether governmental or insurgent forces. This was clearly acknowledged at the final plenary session. A certain confusion arose because Article 1 of the Protocol defines the word “Party” as a State Party to the Second Protocol. However, the understanding was that throughout the text the word “Party” in the phrase “Party to the conflict” includes rebel groups of States party to the Second Protocol but not third States which have not ratified the Second Protocol [64]. The reasoning was that non-governmental forces involved in a non-international armed conflict within a State party to the Protocol are bound by the Protocol through the ratification of the State concerned. [65]

Conclusion

The adoption of the Second Protocol is an important step forward in the legal protection of cultural property in armed conflict. The Protocol addresses the weaknesses of the 1954 Convention and offers adequate solutions. Its main achievements are that it :

clarifies the obligations to take precautionary measures and disseminate the Convention and the Second Protocol ;

updates the 1954 Convention by introducing concepts contained in Additional Protocol I of 1977 ;

offers the opportunity to make the regime of "special protection" effective by replacing it with a new and improved system of "enhanced protection" ;

improves the enforcement mechanism by defining serious violations which have to be punished with a criminal sanction and by imposing a duty upon States to establish jurisdiction over those violations ;

develops humanitarian law by defining those serious violations and by extending the scope of application to non-international armed conflicts.

Another beneficial effect of the Second Protocol is that more attention has been given to the 1954 Convention itself. As a result, a considerable number of States have ratified the 1954 Convention since the review process started and more are in the process of ratification. Much remains to be done, especially as far as marking of cultural property and dissemination are concerned, but at least awareness of the problems has been heightened.

While human life is still more important than objects, it is nevertheless essential to have rules protecting cultural property, as such objects constitute the collective memory of humanity, examples of its greatest achievements, and symbolize human life itself. If cultural property is destroyed, civilian life suffers greatly as well.

Notes

1. "All things of value are defenceless." A famous line by the Dutch poet Lucebert (author's translation).

2. Convention for the Protection of Cultural Property in the Event of Armed Conflict, signed at The Hague, 14 May 1954, reprinted in Dietrich Schindler and Jiri Toman (Eds.), *The laws of armed conflicts: A collection of conventions, resolutions and other documents*, 3rd ed., Martinus Nijhoff/Henry Dunant Institute, Dordrecht/ Geneva, 1988, pp. 745-759.

3. Protocol for the Protection of Cultural Property in the Event of Armed Conflict, signed at The Hague, 14 May 1954, *ibid*., pp. 777-782.

4. Patrick J. Boylan, *Review of the Convention for the Protection of Cultural Property in the Event of Armed Conflict (The Hague Convention of 1954)*, UNESCO, Paris, 1993, p. 19.

5. UNESCO Doc. HC/1999/1, 9 October 1998.

6. See Synoptic report with its Addendum and Corrigendum of comments on the Preliminary Draft Second Protocol to the 1954 Hague Convention received from High Contracting Parties to the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict 1954, other UNESCO Member States and international organizations, UNESCO Docs. HC/1999/4, 15 January 1999, HC/1999/4/Add.1, March 1999, and HC/1999/4/Add.1/Corr.1, 18 March 1999. Military and legal aspects of the preliminary draft were further discussed in the light of modern humanitarian law at an Expert Meeting on the Improvement of the 1954 Hague Convention, Leiden (Netherlands), 17-18 December 1998.

7. Draft Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, UNESCO Doc. HC/1999/1/rev.1, February 1999.

8. Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict, signed at The Hague, 17 May 1999, UNESCO Doc. HC/1999/7, 26 March 1999.

9. 1954 Convention, Article 39(5).

10. Second Protocol, Article 5.

11. *Ibid*., Article 29.

12. *Ibid*., Article 24.

13. *Ibid*., Article 29(4).

14. 1954 Convention, Article 25.

15. Second Protocol, Article 30.

16. Boylan, op. cit. (note 4), pp. 54-57.

17. See Burrus M. Carnahan, "Lincoln. Lieber and the laws of war: The origins and limits of the principle of military necessity", *American Journal of International Law*, Vol. 92, 1998, 213, and Horace B. Robertson, Jr., "The principle of military objective in the law of armed conflict", in Michael N. Schmitt (Ed.), *The Law of Military Operations — Liber Amicorum Professor Jack Grunawalt,* International Law Studies, Vol. 72, Naval War College Press, Newport, Rhode Island, 1998, p. 197.

18. Regulations Respecting the Laws and Customs of War on Land, signed at The Hague, 18 October 1907, Article 23(g), in Schindler/ Toman, *op. cit.* (note 2), p. 83.

19. This was in part because some documents which had identified such limits had failed to become binding treaty law. See, e.g., Article 24(1) of the Hague Rules of Air Warfare, drafted by a Commission of Jurists at The Hague, Dec. 1922 - Feb. 1923, in Schindler/Toman, *op. cit.* (note 2), p. 210 : "Aerial bombardment is legitimate only when directed at a military objective, that is to say, an object of which the destruction or injury would constitute a distinct military advantage to the belligerent".

20. Yves Sandoz, Christophe Swinarski and Bruno Zimmerman (eds.), *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, ICRC/Martinus Nijhoff, Dordrecht/Geneva, 1987, p. 395, quoting Éric David, *La protection des populations civiles pendant les conflits armés*, International Institute for Human Rights, VIIIth Teaching Session, July 1977, Strasbourg, p. 52.

21. Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), in Schindler/Toman, *op. cit.* (note 2), pp. 621-688.

22. *Ibid*., Article 57(3) which provides that "when a choice is possible between several military objectives for obtaining a similar military advantage, the objective to be selected shall be that the attack of which may be expected to cause the least danger to civilian lives and to civilian objects [and which is not cultural property]." The text in brackets shows how Arti-
cle 57(3) would read for States having adopted both Additional Protocol I and the Second Protocol.

23. ICRC Commentary, *op. cit.* (note 20), p. 636, para. 2021.

24. *Ibid*., p. 636, para. 2021.

25. *Ibid*., p. 621, para. 1955.

26. *Ibid*.

27. *Ibid*.

28. Even though Article 53 deals with the use of very special cultural property only, for example cultural property on the International Register of Cultural Property under Special Protection or the new List of Cultural Property under Enhanced Protection, the author will argue below that there is no need to differentiate between the ways in which special or enhanced protection, on the one hand, and general protection, on the other, is lost.

29. ICRC Commentary, *op. cit.* (note 20), p. 648, para. 2079.

30. *Ibid*. (emphasis added). — See also Michael Bothe, Karl Josef Partsch, Waldemar A. Solf, *New Rules for Victims of Armed Conflicts, Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949,* Martinus Nijhoff, The Hague/Boston/London, 1982, p. 334, para. 2.6.

31. Second Protocol, Article 6(b). It is noteworthy that the Protocol speaks of "a waiver on the basis of imperative military necessity", because that is the language used in Article 4(2) of the 1954 Convention. The Second Protocol is additional to the 1954 Convention.

32. *Ibid*., Article 6(c).

33. 1954 Convention, Article 8(1).

34. *Ibid*., Article 8(6).

35. These are: Vatican City (18 January 1960), a refuge at Alt-Aussee in Austria (17 November 1967), six refuges in the Netherlands (Zandvoort (2), Heemskerk (2, cancelled on 22 September 1994), Steenwijkerwold (cancelled on 22 September 1994), Maastricht (12 May 1969)) and the central Oberrieder Stollen refuge in Germany (22 April 1978). See International Register of Cultural Property under Special Protection, UNESCO Doc. CLT-97/WS/12, August 1997.

36. 1954 Convention, Article 8(1)(a).

37. Jiri Toman, *The Protection of Cultural Property in the Event of Armed Conflict,* Dartmouth/Unesco, Aldershot/Paris, 1996, pp. 108-109.

38. Second Protocol, Article 10.

39. *Ibid*., Articles 11(5) and 11(7).

40. See Toman, op. cit. (note 37), pp. 108-111, for examples of important cultural property that, for one reason or another, has not been included in the International Register of Cultural Property under Special Protection.

41. 1954 Convention, Article 11(2).

42. Second Protocol, Article 13 (emphasis added).

43. See Additional Protocol I, Article 59.

44. Second Protocol, Article 6(d).

45. Additional Protocol I, Article 57(2)(c).

46. *Supra*, note 32.

47. 1954 Convention, Article 11(2).

48. Second Protocol, Article 13(2)(c).

49. 1954 Convention, Article 28.

50. Second Protocol, Article 18(2)

51. *Ibid*., Articles 17.20.

52. Horst Fischer, *Presentation of the Results of the Working Group on Chapter 4,* UNESCO Doc. HC/1999/INF.5, 25 March 1999, p. 2.

53. Additional Protocol I, Article 85(4)(d).

54. Second Protocol, Article 16(1).

55. *Ibid*., Article 16(2)(b).

56. *Ibid*., Article 16(2)(a).

57. Fischer, *op. cit.* (note 52), p. 3.

58. Second Protocol, Article 16(2)(chapeau).

59. Toman, *op. cit.* (note 37), p. 294 (emphasis in original).

60. Second Protocol, Article 16(2)(a).

61. *Ibid*., Article 16(2)(a).

62. Fischer, *op. cit.* (note 52), p. 3.

63. Second Protocol, Articles 3 and 22.

64. Third States which have not ratified the Second Protocol are generally referred to as “party” (in lower case).

65. It is unfortunate that recognition of the potential confusion of the definition of “Party” and the use of the term “Party to the conflict” came only in the last hours of the Diplomatic Conference. As a result, there was no discussion on whether the general understanding that the Second Protocol applies to governmental forces and rebel groups in a non-international armed conflict is also valid for Article 11(9). It is difficult to say whether this was indeed the intention of States, as the Working Group on Chapter 3 (Enhanced Protection) did not discuss the issue.

Advisory Opinion of the International Court of Justice on the legality of the use of nuclear weapons under international law - A few thoughts on its strengths and weaknesses
by Manfred Mohr

Contents

Manfred Mohr, *Doctor of Laws, is a professor of international law and a long-standing expert on international humanitarian law. The following article is an expanded version of a lecture to the Committee of Experts on international humanitarian law of the German Red Cross. The sections dealing with the Court's jurisdiction have been left out.*

On 8 July 1996, the International Court of Justice finally rendered its Advisory Opinion on the legality of the threat or use of nuclear weapons. The procedure had been dragging on since the start of the public sittings on 30 October 1995. Several deadlines set by the Court for reaching a decision came and went, ultimately giving rise to the fear that there would be no decisive majority to affirm the basic unlawfulness of the use of nuclear weapons. This would have been a bitter setback for the initiators of the Advisory Opinion proceeding and for the development of international law.

An NGO success story [1]

In May 1992 an international campaign was launched in Geneva by non-governmental organizations (NGOs) under the title "World Court Project". The original promoters of the campaign were the long-standing International Peace Bureau (IPB) in Geneva, the well-known International Physicians for the Prevention of Nuclear War and the International Association of Lawyers Against Nuclear Arms, formed at the end of the 1980s. Some 10 more (international) NGOs, including Greenpeace International, later joined in. What at the outset looked like a rather unpromising initiative by a few determined "peace activists" soon developed into a worldwide movement made up of numerous non-governmental and governmental players.

This was yet another demonstration of the effective, mobilizing power of NGOs — so-called civil society — even beyond the realm of human rights. The Red Cross Movement is also part of this "non-governmental" world, in spite of its separate identity shaped by the fundamental principles of the Red Cross, the instances where it comes together with the community of States within the framework of the International Conference of the Red Cross, and the special status of the International Committee of the Red Cross (ICRC). The greater the extent to which the Red Cross Movement defines itself as a *specific* entity within that world of NGOs, the sooner it can cooperate with those organizations — with due respect for the principles of impartiality and neutrality. This is increasingly the case not only in the area of human rights (the German Red Cross is part of an NGO forum on this topic in Germany, for instance), but also in the disarmament sector, in particular as regards the nuclear issue. Since Hiroshima and Nagasaki, the International Red Cross has repeatedly stated its position on the matter [2].

What is and always will be crucial is that NGO initiatives are taken up and implemented by the community of States. Thus the World Court Project did not remain — as Judge Oda somewhat critically observes — a mere "idea" brought up by a handful of NGOs [3]; on the contrary, it soon turned out that NGOs and States alike felt that the end of East-West confrontation had by no means resolved the nuclear issue. And it was not just a matter of the danger of proliferation. Humanity's survival was still threatened by the nuclear arsenals in the hands of the five true nuclear powers. Hence the idea of applying to the highest legal authority — the International Court of Justice — to clarify the nature of those weapons once and for all.

The main point of reference is international humanitarian law, which seems at long last to have lost its reputation as an abstruse body of law and now enjoys considerable popularity outside the Red Cross Movement, as borne out by the numerous declarations made by the United Nations and by European institutions. The brutality of the war in Yugoslavia and the establishment of an International Tribunal for the former Yugoslavia no doubt largely contributed to this development [4].

In the proceeding in question, the Court received a record number of 43 written statements from States — further evidence of the unabated interest in this question. Twenty-three States made oral statements; among them, 14 came out in favour of the illegality of nuclear weapons, in contrast to the nuclear-weapon States and their (closest) partners, which were against it [5]. Developing countries formed the majority within the anti-nuclear or pro-Advisory Opinion group. To these countries, the situation of "nuclear apartheid" was simply intolerable, as also emerged from the negotiations and outcome of the conferences on the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and on the Comprehensive Nuclear-Test-Ban Treaty. Even massive pressure from the nuclear powers failed to persuade those States otherwise. This pressure, exerted even before the Court handed down its Advisory Opinion, may well have had the opposite effect.

In addition, there were the differing and in part contradictory positions of other States, such as Australia and New Zealand. While the latter, under the impression of the French nuclear tests, was in favour of the Court banning nuclear weapons, Australia too promoted the idea of a comprehensive prohibition on nuclear weapons, but failing that (and for fear of a negative finding, as outlined at the beginning of this article), wanted the Court to decline to render an opinion.

We should now like to comment on a few important findings in the Advisory Opinion that echo key points from the nuclear weapons debate [6], though some issues are left unresolved. The crucial thing is that the overall trend is towards a strengthening of the anti-nuclear weapons camp.

The applicable law

The Court starts by examining the right to life as guaranteed in Article 6, paragraph 1, of the United Nations International Covenant on Civil and Political Rights (CCPR). But that treaty is then declared not relevant: although human rights law applies even in wartime, and the right to life cannot be suspended by operation of Article 4 of the Covenant under any circumstances, the question of what constitutes an arbitrary deprivation of life can be decided only by reference to the applicable *lex specialis*, namely international humanitarian law [7]

The Court does not enter into a discussion of the famous General Commentary 14/23 of the Human Rights Committee responsible for monitoring compliance with this Covenant. In its commentary, the Committee described the production, testing and stockpiling of nuclear weapons as one of the greatest threats to the right to life and demanded that those activities, as well as the use of nuclear weapons, be banned and declared to be crimes against humanity [8]. This link between the nuclear weapons issue — i.e., the question of a general ban and an effective prohibition on the use of such weapons — and the right to life should have been more clearly perceived by the Court. It is not only a matter of parallel effects, but also of mutual reinforcement: the use of nuclear weapons violates both the right to life and international humanitarian law. Here as in many other contexts, there is an obvious overlap between international humanitarian law and human rights law.

After declaring the prohibition on genocide to be pertinent under certain specific circumstances (intent to destroy a group), the Court undertakes a more detailed examination of the relationship between the use of nuclear weapons and environmental protection [9]. Its conclusion is that although existing international law pertaining to the protection of the environment does not specifically prohibit the use of nuclear weapons, "important environmental factors" must be taken into account in the implementation of international humanitarian law. Indeed, widespread and long-lasting damage to the environment resulting from the use of nuclear weapons is a key argument in favour of outlawing such weapons [10].

The Court goes on to establish a link with what it describes as the "unique characteristics" of nuclear weapons [11]. These lie in the vastly destructive power of such arms (including the radiation phenomenon), thus rendering the nuclear weapon "potentially catastrophic". Furthermore: "They have the potential to destroy all civilization and the entire ecosystem of the planet". What is highly significant is that the Court extends these "unique characteristics", i.e., the capacity to cause untold human suffering and damage to generations to come, to *all* types of nuclear weapons and use thereof. In so doing, it clearly distances itself from academic theories, such as the purportedly admissible theory of isolated use of nuclear weapons in Antarctica [12]. At least such theories can be countered with the ever-present risk of escalation.

The unique characteristics of nuclear weapons are then examined in the light of the applicable law, the main components of which the Court considers to be the provisions of the Charter of the United Nations relating to the use of force, and international humanitarian law [13].

Nuclear weapons and self-defence

The Court begins by aptly observing that Article 51 of the Charter of the United Nations concerning the right to individual or collective self-defence makes no reference to specific weapons. On the other hand, the concept of self-defence is subject to the conditions of necessity and proportionality. Here the Court expresses reservations as to whether nuclear weapons may be used, and because of the "nature" of such arms and the risk they entail, its misgivings also extend to "small" and "tactical" nuclear weapons, and the conduct of reprisals under certain circumstances.

Alongside these very clear and convincing findings, one thing is to be regretted, however, and that is the *distinction* drawn by the Court between the principle of proportionality (which *per se* would not unconditionally exclude any recourse to nuclear weapons in self-defence) and international humanitarian law (to which reference must ultimately be made in determining lawfulness). The fact is, however, that humanitarian law is *itself* influenced by the principle of proportionality, which basically links it with international law as deriving from the Charter or peacetime international law. In other words, the use of nuclear weapons, more specifically for a "first strike", is always disproportionate *and/because it is* contrary to international humanitarian law.

The Court then turns to the policy of deterrence, which, in its view, requires that there be a credible intent to use nuclear weapons. As in the case of actual use of nuclear weapons, such a "threat" may be contrary to international law if it violates the principles of necessity and proportionality [14]. Here again, the Court's position is clearly in line with those of the experts in international law or political science forming part of the anti-nuclear weapons camp.

A general ban on nuclear weapons?

It is interesting to note that by way of introduction the Court turns this question around; equally interesting is how it does so: conventional and customary international law contain no specific prescription *authorizing* the use of nuclear weapons, or of any other type of weapon for that matter — yet another important observation [15].

The Court further states that to date there is no treaty-based general ban on nuclear weapons similar to the prohibitions on biological and chemical weapons. It does, however, distinguish a trend. Treaties such as the Comprehensive Nuclear-Test-Ban Treaty, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the treaties on nuclear-free zones seem to point to increasing concern within the international community over nuclear arms, "foreshadowing a future general prohibition of the use of such weapons".

That is precisely the process that is now under way. It is marked by a series of intermediate steps, the Comprehensive Nuclear-Test-Ban Treaty being one of them. The crucial thing is that those activities should not become mere substitutes for action [16] The objective remains complete nuclear disarmament, i.e., the total elimination of nuclear weapons, as enshrined in Article VI of the NPT. The Court itself firmly re-emphasizes that goal at the end of the Advisory Opinion, pointing out that Article VI does not contain a mere obligation of conduct, but an obligation to achieve a precise result [17].

In this light, the project for a treaty establishing a (total) ban on the use of nuclear weapons, pursued for years by the United National General Assembly, can only be viewed as (yet) another intermediate step. In any case, such a treaty could do little more than strengthen existing instruments, which raises the question as to whether one should not proceed directly towards a comprehensive (treaty-based) ban on nuclear weapons themselves. Endeavours along those lines have been under way at inter-governmental and non-governmental levels for some time now [18]. The present Advisory Opinion will surely give strong impetus to that process, particularly within the framework of the United Nations [19].

As regards the other source of international law, namely customary law, the Court is unable to establish the existence of a convincing *opinio juris*. It holds that the aforementioned endeavours by the United Nations General Assembly to arrive at a convention prohibiting nuclear weapons indeed reflect the wish of a very large section of the international community, and as such constitute a "nascent *opinio juris*". This is matched, however, by the still strong adherence to the policy of deterrence, construed as the right of a State to use nuclear weapons in self-defence against an armed attack threatening its "vital security interests" [20]. Unfortunately, the Court *at this point* fails to refer back to the principle of proportionality, which of course applies also in customary law. Further, the question arises as to how far adherence by a mere handful of States to a doctrine that is contrary — at least in tendency — to international law can nullify the view of law held by the vast majority of States [21].

International humanitarian law

The centrepiece of the Advisory Opinion is the Court's examination of the use or threat of nuclear weapons in the light of the principles and rules of international humanitarian law [22]. The following were singled out as the cardinal principles of that law:

1. the protection of the civilian population and civilian objects and the distinction between combatants and non-combatants;

2. the need to avoid causing unnecessary suffering and the fact that States do not have unlimited freedom of choice of means in the weapons they use.

The Court explains that though the Diplomatic Conferences of 1949 and 1974-1977 did not address the nuclear issue, it cannot be concluded that the established principles of international humanitarian law are not applicable to the use of nuclear weapons. It thus falls back on the minimal position of the so-called (purported) "nuclear consensus", which also emerges from a statement in this connection by the Federal Republic of Germany [23]. For the purposes of the Advisory Opinion, this position may, however, be regarded as sufficient. In addition to the principles and rules of international humanitarian law the Court addresses the principle of neutrality, which, as it rightly maintains, unquestionably applies to all international armed conflict, whatever the type of weapon used.

Having established the applicability of those principles, the Court reaches the following "split" and to my mind contradictory conclusions:

(1) in view of the "unique characteristics" of nuclear weapons, the use of such weapons is scarcely reconcilable with the requirements of international humanitarian law;

(2) nevertheless, the Court does not consider itself in a position to conclude with certainty that the use of nuclear weapons is at variance with international humanitarian law *in any* circumstance; after all, States have a right to survival, a right of self-defence, and there is the policy of deterrence to which an appreciable section of the international community adhered for many years.

With the affirmation in paragraph 2, the Court in my opinion contradicts its previous positions, as this statement is a clear concession to nuclear-weapon States and the advocates of the doctrine of nuclear deterrence. The yardsticks of proportionality and international humanitarian law are applicable to any use of nuclear weapons or of any other weapon, as the Court earlier demonstrated. The *raison d'être* of international humanitarian law is precisely to limit the effects of armed conflict, regardless of who is waging the conflict and in what circumstances.

Certainly no-one would think of approving the use of poison gas if "vital security interests" or the "survival" of a State were at stake. For exceptional circumstances of that nature are always present to some extent in the event of armed attack (which entails the right of self-defence), especially when the question of the (lawful) use of nuclear weapons arises. It is precisely when a State wishes to survive that it should sooner *refrain* from using nuclear weapons!

The Court thus concludes that the threat or use of nuclear weapons is in general contrary to international law, but it does also leave a sort of "escape hatch" in the event of a threat to survival. The decision was a very close one, with seven votes to seven, plus the President's casting vote. It should, however, be borne in mind that three (formal) opposing votes came from judges who were against any possible justification of the use of nuclear weapons. The "real" opposing votes came only from the judges from the three nuclear-weapon States, i.e., the USA, the United Kingdom and France. The German Judge Fleischhauer voted with the President's majority.

Most of the declarations and opinions of the judges revolve around paragraph 2E of the Advisory Opinion. There is distinct opposition against the "escape hatch" left open by the Court (Weeramantry, Shahabuddeen, Koroma). Even Bedjaoui emphasizes that the survival of a State cannot take precedence over humanity's right of survival. In my opinion, Koroma aptly criticizes a tendency to return to an outmoded doctrine of survival which is untenable in law, and rightly concludes that the Court has not answered the question actually put to it, that is, whether it is permitted to use nuclear weapons "*in any circumstance*". Judge Higgins is rather perplexed by the answer set out in paragraph 2E, while Fleischhauer sees it as the smallest common denominator between the conflicting principles of international humanitarian law and the right of self-defence [24] — a conflict which to my mind is both unnecessary and incomprehensible. Just how far a practical instance of such an "extreme circumstance" can be taken emerges from Schwebel's discussion of Operation Desert Storm (threat of the use of nuclear weapons to deter the enemy from using biological and chemical weapons against the coalition forces) [25].

In their initial comments on the Opinion, nuclear-weapon States such as the USA and the United Kingdom made use of that "escape hatch" by explaining that, accordingly, the use of nuclear weapons could be admissible under international law and that the Advisory Opinion would not in any way affect defence policy [26]. It is obvious just how needless and in fact dangerous is that "escape hatch" in paragraph 2E. Hence the importance of underscoring the Court's (positive) *core* affirmation of the fundamental *illegality* of the use of nuclear weapons *under international law* (first subparagraph of paragraph 2E). In addition, there are the other important statements referred to earlier, e.g., the absence of any special prescription in international law authorizing the use of nuclear weapons and the requisite compatibility of the law governing the use of nuclear weapons with the law applicable in armed conflicts.

Concluding remarks

Despite some flaws and contradictions, the Court's Advisory Opinion of 8 July 1996 represents a triumph for the rule of law in international relations. The Court has taken a stand on one of the most burning legal and political questions of our time, and its response is in essence a negative one. Even though such Advisory Opinions are not binding, they nonetheless carry very high authority. The impressive structure of this Opinion places it among the ranks of earlier, "famous" opinions handed down by the Court which have substantially influenced the development of international law [27].

Notes :

Original: German

1. See in this regard M. Mohr, "Das World Court Project — vom Erfolg einer NGO-Kampagne", *Humanitäres Völkerrecht. Informationsschriften*, 8 (1995) 3, pp. 146 ff.

2. See for example, M. Mohr, in M. Cohen, M. Gouin (eds), *Lawyers and the nuclear debate*, Ottawa, 1988, pp. 85 ff.

3. See International Court of Justice, *Legality of the threat or use of nuclear weapons*, Advisory Opinion of 8 July 1996 (hereinafter referred to as "Opinion"), Dissenting Opinion of Oda, para. 8.

4. As regards this development as a whole, see M. Mohr, "Das humanitäre Völkerrecht 1945-1995. 50 Jahre Entwicklung", *Bochumer Schriften zur Friedenssicherung und zum Humanitären Völkerrecht*, Vol. 31, Bochum, 1996.

5. See for example *IPB News*, December 1995, pp. 3 ff.

6. From the abundant literature available, we can only cite a few particularly outstanding works, namely:
N. Singh, E. McWhinney, *Nuclear weapons and contemporary international law*, Leiden, 1988;
M. Cohen, M.E. Gouin (eds), *Lawyers and the nuclear debate*, Ottawa, 1988;
B. Graefrath, "Zum Anwendungsbereich der Ergänzungsprotokolle zu den Genfer Abkommen vom 12. August 1949", *Staat und Recht*, 29/1980, pp. 133 ff.;
H. Fischer, *Der Einsatz der Nuklearwaffen nach Art. 51 des I. Zusatzprotokolls zu den Genfer Konventionen von 1949*, Berlin, 1985;
M.C. Ney, *Der Einsatz von Atomwaffen im Lichte des Völkerrechts*, Frankfurt a. M., 1985;
R. Falk, E. Meyrowitz, J. Anderson, *Nuclear weapons and international law*, Princeton, 1981;
H.-M. Empell, *Nuklearwaffeneinsätze und humanitäres Völkerrecht*, Heidelberg, 1993.

7. See Opinion, paras. 24 and 25.

8. For further evidence, see M. Nowak, *CCPR Commentary,* Kehl *et al.*, 1993, pp. 108 ff.

9. See Opinion, paras. 26 ff.

10. In lieu of several sources, see P. Weiss, B. Weston, R. Falk, S. Mendlowitz, "Draft Memorial in support of the application by the World Health Organization for an advisory opinion by the International Court of Justice on the legality of the use of nuclear weapons under international law", *Transnational Law and Contemporary Problems*, 4 (1994) 2, pp. 24 ff.

11. See Opinion, paras. 35 ff.

12. In this connection, see for example Mohr, *op. cit.* (note 1 above), p. 150. Schwebel, in his Dissenting Opinion (p. 7), makes similar comments regarding "tactical nuclear weapons" and the use of nuclear weapons "in a desert".

13. See Opinion, para. 34 and paras. 37 ff.

14. *Ibid*., para. 48. See also M. Mohr, "Völkerrecht kontra nukleare Abschreckungsdoktrin: einige wesentliche und bleibende Einwände", *Demokratie und Rechte*, 19 (1991) 1, pp. 47 ff. In his Declaration, Judge Shi unequivocally describes "nuclear deterrence" as a practice that should be an *object* of regulation by law.

15. *Ibid*., para. 52 and paras. 53 ff.

16. Hence one might well question the effectiveness and sense of the so-called "security assurances" extended by the nuclear powers; for example, those assurances entail the duty to provide humanitarian assistance for victims of nuclear weapons (!). Schwebel (Dissenting Opinion, pp. 1 ff.) goes too far, however, when he interprets the existence of such assurances — together with the NPT — as overall recognition of the legality of nuclear weapons, against the background of "fifty years of the practice of States".

17. Opinion, paras. 98 ff.

18. For instance, an NGO Abolition Caucus has now been formed; see Mohr, *op. cit.* (note 1 above), p. 152.

19. Malaysia has in the meantime launched an initiative for a UN General Assembly resolution which welcomes the Opinion of the Court and calls upon States to start negotiations in 1997 on a convention comprehensively banning nuclear weapons.

20. See Opinion, paras. 64 ff.

21. Thus Judge Shi, in his Declaration, points out that the international community after all comprises 185 States and its structure is built on the principle of sovereign equality.

22. *Ibid.*, paras. 74 ff.

23. According to which the (new) rules established in Protocol I additional to the Geneva Conventions apply only to conventional weapons, without prejudice to other rules applicable to other types of weapons; in this regard, see mainly Fischer (note 6 above).

24. See, respectively, Dissenting Opinion of Koroma, *inter alia* pp. 4 and 18; Dissenting Opinion of Higgins, para.
41; Separate Opinion of Fleischhauer, para. 5.

25. See Dissenting Opinion of Schwebel, pp. 8 ff.

26. See *War & Peace Digest*, 4 (1996) 3, p. 2.

27. For instance the Advisory Opinions on the reservations to the Genocide Convention (1951), "Certain Expenses of the United Nations" (1962), and on Namibia (1971).