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### CHAPTER BIBLIOGRAPHY

- BERUTO Luca (ed.), *The conduct of Hostilities, Revisiting the Law of Armed Conflict 100 Years after the 1907 Hague Conventions and 30 Years after the 1977 Additional Protocols*, San Remo, International Institute of International Humanitarian Law, 2007, 160 pp.
- BOOTHBY William H., *The Law of Targeting*, Oxford, OUP, 2012, 600 pp.
- DINSTEIN Yoram, *The Conduct of Hostilities under the Law of International Armed Conflict*, 3rd ed, Cambridge, CUP, 2016, 358 pp.
- FORD Christopher M. & WILLIAMS Winston (eds.), *Complex battlespaces: the law of armed conflict and the dynamics of modern warfare*, New York, OUP, 2019, 552 pp.
- GREPPI Eduardo (ed.), *Conduct of hostilities: the Practice, the Law and the Future*, Milan, International Institute of Humanitarian Law/FrancoAngeli, 2015, 234 pp.
- SCHMITT Michael N. & HEINTSCHEL VON HEINEGG Wolff (eds.), *The Conduct of Hostilities Under International Humanitarian Law*, Vol. 1 & 2, Farnham, Burlington, Ashgate, 2012, 534 & 570 pp.

## Introduction

### SPECIFIC BIBLIOGRAPHY

#### Suggested reading:

- BAXTER Richard R., "The Duties of Combatants and the Conduct of Hostilities (The Law of the Hague)", in *International Dimensions of Humanitarian Law*, Geneva, Henry-Dunant Institute/UNESCO, 1986, pp. 93-133.
- ICRC, *International Humanitarian Law and the Challenges of Contemporary Armed Conflicts – Recommitting To Protection In Armed Conflict On The 70th Anniversary Of The Geneva Conventions*, Geneva, ICRC, 2019, 81 pp.
- International Law Association Study Group, *The Conduct of Hostilities and International*

*Humanitarian Law: Challenges of 21st Century Warfare*, Stockton Center for the Study of International Law, Johannesburg, 2017, 48 pp.

- KALSHOVEN Frits & ZEGVELD Liesbeth, *Constraints on the Waging of War, An Introduction to International Humanitarian Law*, 4<sup>th</sup> Ed., Geneva, ICRC, 2011, 302 pp.
- MELZER Nils, "Hostilities", in *Targeted Killing in International Law*, Oxford, OUP, 2008, pp. 241-420.

#### Further reading:

- ARRASSEN Mohamed, *Conduite des hostilités, droit des conflits armés et désarmement*, Brussels, Bruylant, 1986, 605 pp.
- ARVIDSSON Matilda, "Targeting, gender, and international posthumanitarian law and practice: framing the question of the human in international humanitarian law", in *Australian Feminist Law Journal*, Vol. 44, No. 1, 2018, pp. 9-28.
- DINSTEIN Yoram, "Jus in Bello Issues Arising in the Hostilities in Iraq in 2003", in *IYHR*, Vol. 34, 2004, pp. 1-14.
- DURHIN Nathalie, "Protecting civilians in urban areas: A military perspective on the application of international humanitarian law", in *IRRC*, Vol. 98, No. 1, 2016, pp. 177-199.
- DRUMBL Mark A. & BARRETT Jastine C., *Research Handbook on Child Soldiers*, Cheltenham, Northampton, E.Elgar, 2019, 542 pp.
- EPSTEIN Melissa & BUTLER Richard, "The Customary Origins and Elements of Select Conduct of Hostilities Charges before the International Criminal Tribunal for the Former Yugoslavia: A Potential Model for Use by Military Commissions", in *Military Law Review*, Vol. 179, 2004, pp. 68-127.
- GEIß Robin & SIEGRIST Michael, "Has the armed conflict in Afghanistan affected the rules on the conduct of hostilities?", in *IRRC*, Vol. 93, 2011, pp. 11-46.
- MURRAY Daragh (ed.), AKANDE Dapo, GARRAWAY Charles, HAMPSON Françoise, LUBELL Noam, WILMSHURST Elizabeth, "Conduct of Hostilities and Targeting", in *Practitioner's Guide to Human Rights Law in Armed Conflict*, Oxford, OUP, 2016, chapter 5.
- NEWTON Michael A., *The United States Department of Defense Law of War Manual, Commentary and Critique*, Cambridge, CUP, 2018, 473 pp.
- OHLIN Jens David, MAY Larry & FINKELSTEIN Claire (eds.), *Weighing Lives in War*, Oxford, OUP, 2017, 352 pp.
- RÉDALIÉ Lorenzo, *La conduite des hostilités dans les conflits armés asymétriques : un défi au droit humanitaire*, Genève, Paris, L.G.D.J., Schulthess, 2013, 402 pp.
- ROSCINI Marco, "Animals and the Law of Armed Conflict", in *Israel Yearbook on Human Rights*, Vol. 47, 2017, pp. 35-67.
- WATKIN Kenneth, "Targeting in Air Warfare", in *Israel Yearbook on Human Rights*, Vol. 44, 2014, pp. 1-67.

## I. Distinction between the Law of The Hague and the Law of Geneva

(See *Supra* Fundamentals of IHL, Historical Development of International Humanitarian Law)

### **Introductory text**

The conditions for protection, the protective regimes and the applicable sources of IHL differ depending on whether a person finds themselves in the power of a party to the armed conflict or whether they are affected by hostilities. Rules of the first regime are traditionally referred to as 'Geneva Law' because such rules are mainly codified in the Geneva Conventions, while the rules of the latter are traditionally referred to as 'Hague Law' because they were initially codified in the Hague Regulations. Currently, however, the rules on the conduct of hostilities are mainly found in Protocol I, and in parallel in customary IHL applicable to both IACs and NIACs.

According to the protective regime governing the conduct of hostilities, civilians and, to a much more limited extent, combatants and fighters, are protected against attacks and effects of hostilities by an adverse party to the conflict, in whose power they are not. The first requirement of those rules is that only means (that is, weapons) and methods (in other words, tactics) of warfare that are not prohibited by IHL may be used. Second, only combatants, fighters, civilians directly participating in hostilities and military objectives may be directly targeted. Third, even if an attack is directed against a lawful target, its incidental impact on civilians and civilian objects (in other words, collateral damages) may not be excessive in relation to the anticipated military advantage gained from eliminating or neutralizing the target. Finally, all feasible precautionary measures must be taken to spare the civilian population and civilian objects from the effects of war. This protective regime is – for the most part – very similar in both IACs and NIACs.

In contrast, the legal regime protecting persons who are in the power of a party to the armed conflict differs substantially depending on whether the armed conflict is an IAC or a NIAC. In the former, protection is mostly afforded to 'protected persons'. Thus, the first question that must be addressed is whether the person who is in the hands of a party to the conflict qualifies as a 'protected person' under one of the four Geneva Conventions. If so and depending on the individual's specific situation and status, an individual is protected by one or more of the protection regimes established by the Conventions for the wounded and sick military on land (Convention I), the wounded, sick and shipwrecked at sea (Convention II), prisoners of war (Convention III) and civilians (Convention IV). The protective rules of Convention IV are further subdivided into rules protecting (mainly enemy) foreigners in a belligerent State's own territory and rules applicable to occupied territories that not only protect the population of such territories but also govern the occupying power's administration of the territory. Individuals who do not qualify as a 'protected person', however, only benefit from a more limited set of fundamental guarantees. In NIACs, civilians and fighters in the power of the enemy traditionally benefit from the same protection, but it is increasingly argued that IHL provides an inherent legal basis to intern the latter.

Similarly, as to the protection of objects, it is important to distinguish between the rules of Geneva Law that protect objects against destruction by the party controlling them and the rules of Hague Law that protect

objects against attacks by the adversary of the party controlling the objects. To take a concrete example, the destruction by a party to an armed conflict of houses in territory it occupies or controls will be governed by Geneva Law, and not by the rules on the conduct of hostilities. This means that such destruction is prohibited unless imperatively demanded by the necessities of the conflict, while the concept of military objective, crucial for the conduct of hostilities, is irrelevant here.

The demarcation between rules protecting persons in the power of an adverse party and the rules protecting persons against the effects of hostilities is obviously not absolute. Indeed, the rules on humanitarian assistance not only benefit civilians, POWs, military wounded and sick in the power of a party but are also equally addressed to any adversary of that party to the extent all parties to a conflict must permit the free passage of relief convoys and humanitarian organizations. Additionally, on the battlefield or the frontlines, it may prove difficult to determine whether persons are in the power of the party affecting them and thus which regime should apply. Similarly, it is also sometimes controversial whether certain prohibitions in IHL, such as the prohibition of murder in Common Article 3, applies only to summary executions of persons in the power of a party or whether it also extends to the conduct of hostilities.

Despite these nuances, the distinction between the rules falling under Geneva Law and those rules contained within Hague Law is important as it has a practical impact in several respects. First, the complicated question of who qualifies as a protected civilian either on the basis of nationality or arguably allegiance is relevant only to the application of Geneva Law. Second, the difficult debates regarding what constitutes direct participation in hostilities in both IACs and NIACs as well as about who is a civilian in a NIAC are irrelevant for Geneva Law as such questions only concern the application of Hague Law. Third, the distinction between IACs and NIACs is much more important for Geneva Law than for Hague Law because protection in IACs largely depends on status. Fourth, a party may conduct hostilities only against persons and objects that are not in its power. In contrast, the use of force against persons in the power of a party is governed by the relevant human rights rules relating to law enforcement operations.

A further and most important reason why Hague Law has still to be distinguished from Geneva Law, is that it is much easier to establish violations of Geneva Law (for example, whether a prisoner has been tortured, a person has been raped or a house in an occupied territory has been destroyed) than it is to determine violations of Hague Law (for instance, whether a person killed or a school destroyed by an aerial bombardment constituted a violation of IHL). What counts for the Hague Law is not what was destroyed or who was killed or injured but what and who was targeted. To target civilians or civilian objects violates IHL. Whether an attack is lawful under Hague Law does not depend on the results of the attack but rather an ex ante evaluation by the attacking party. Establishing whether an attack violated Hague Law requires a complex analysis of several legal factors, including the status of the targeted person or object, whether such person or object was the actual target, the actual or intended use of the targeted object, the military value to the attacker in eliminating the targeted person or object in relation to the extent (if any) of incidental effects upon civilians and whether the attacker took all feasible precautionary measures in attack to avoid or

minimize incidental effects upon civilians. Assessing these legal factors necessarily requires knowledge of the military plans of both parties. Parties, however, do not make such information public and they do not have an obligation to do so. Fact-finding bodies and the media therefore either neglect the fundamentals of the law or come only to very tentative conclusions concerning the legality of a given attack. Criminal tribunals do not even have this option, which may explain the limited number of convictions for violations of the Hague law.

Application of Geneva Law rules or enquiries into questions relevant only under Geneva Law when an issue of conduct of hostilities arises and vice versa is one of the most frequent mistakes committed by students, practitioners, the media and courts when determining the legal rules applicable and any violation(s) in relation thereto.

## ▲ CASES AND DOCUMENTS

- ICJ, Nuclear Weapons Advisory Opinion [Para. 75]
- France, Accession to Protocol I [Part A.]
- Colombia, Constitutional Conformity of Protocol II [Para. 6]
- Colombia, Special Jurisdiction for Peace, Crimes against the Environment in Cauca

## II. The protection of the civilian population against the effects of hostilities

### ▲ SPECIFIC BIBLIOGRAPHY

#### Suggested reading:

- GASSER Hans-Peter & DORMANN Knut, "Protection of the Civilian Population", in FLECK Dieter (ed.), *The Handbook of International Humanitarian Law*, Oxford, OUP, 3rd ed., 2013, pp. 221-320.
- HENDERSON Ian, *The Contemporary Law of Targeting: [Military Objectives, Proportionality and Precautions in Attack under Additional Protocol I]*, Leiden, Boston, M. Nijhoff, 2009, 266 pp.
- SCHUTTE Robert, *Civilian Protection in Armed Conflicts: Evolution, Challenges, and Implementation*, Wiesbaden, Springer, 2015, 236 pp.
- SLIM Hugo, *Killing Civilians: Method, Madness and Morality in War*, Oxford, OUP, 2010, 300 pp.

#### Further reading:

- GARRAWAY Charles H.B., "The Protection of Civilian Objects From the Effects of Air and Missile Warfare: Are There Any Difference Between the Immediate Battlefield and the Extended Battlefield", in *Israel Yearbook on Human Rights*, Vol. 44, 2014, pp. 125-144.
- GROSS Michael L., "Asymmetric War, Symmetrical Intentions: Killing Civilians in Modern Armed Conflict", in *Global Crime*, Vol. 10, No. 4, November 2009, pp. 320-336.
- KILOVATY Ido, "ICRC, NATO and the U.S.: direct participation in hacktivities: targeting private

contractors and civilians in cyberspace under international humanitarian law", in *Duke Law Review*, Vol. 15, No. 1, 2016, 38 pp.

- SOLF Waldemar A., "Protection of Civilians Against the Effects of Hostilities under Customary International Law and under Protocol I", in *American University Journal of International Law and Policy*, Vol. 1, 1986, pp. 107-135.

## 1. Basic rule: Art. 48 of Protocol I

[CIHL, Rule 7]

### Quotation 1

Article 48: Basic rule

In order to ensure respect for and protection of the civilian population and civilian objects, the Parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives.

[Source: Protocol I]

### Quotation 2

Considering: [...]

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. [...]

[Source: Declaration Renouncing the Use, in Time of War, of certain Explosive Projectiles under 400 Grammes Weight, Saint Petersburg, November 29/December 11, 1868, paras 2-3 of the Preamble; original text in French; English translation in Parliamentary Papers, vol. LXIV, 1869, p. 659; reprinted from Schindler, D. & Toman, J. (eds), *The Laws of Armed Conflicts: A Collection of Conventions, Resolutions and Other Documents*, 4th ed., Leiden, Boston, M. Nijhoff, 2004, p. 91; also available on <http://www.icrc.org/ihl>]

## • CASES AND DOCUMENTS

- Belgium, Public Prosecutor v. G.W.
- ICRC Appeals on the Near East
- Israel/Gaza, Operation Cast Lead
- Israel, Human Rights Committee's Report on Beit Hanoun
- United States/United Kingdom, Report on the Conduct of the Persian Gulf War
- Case Study, Armed Conflicts in the former Yugoslavia [Para. 13]
- Federal Republic of Yugoslavia, NATO Intervention
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015  
(Paras 229-230)

## • SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- DOSWALD-BECK Louise, "The Value of the Geneva Protocols for the Protection of Civilians", in MEYER Michael (ed.), Armed conflict and the New Law: Aspects of the 1977 Geneva Protocols and the 1981 Weapons Conventions, London, 1989, pp. 137-172.
- WARD Christopher, "Distinction: The Application of the Additional Protocols in the Theatre of War", in Asia-Pacific Yearbook of International Humanitarian Law, vol. 2, 2006, pp. 36-45.

### Further reading:

- GEHRING Robert W., "Protection of Civilian Infrastructures", in Law and Contemporary Problems, Vol. 42/2, 1978, pp. 86-139.
- OBRADOVIC Konstantin, "La protection de la population civile dans les conflits armés internationaux", in CASSESE Antonio (ed.), The New Humanitarian Law of Armed Conflict, Naples, Editoriale Scientifica, Vol. I, 1979, pp. 128-160.
- SALAHI Reem, "Israel's War Crimes: a First Hand Account of Israel's Attacks on Palestinian Civilians and Civilian Infrastructure", in Rutgers Law Record, Vol. 36, 2009, pp. 201-223.
- SAUSSURE Hamilton de, "Belligerent Air Operations and the 1977 Geneva Protocol I", in Annals of Air and Space Law, Vol. 1, 1976, pp. 33-47.
- STERN Orly Maya, Gender, Conflict and international humanitarian law: a critique of the 'principle of distinction', London, New-York, Routledge, 2019, 242 pp.
- URBINA Julio Jorge, Protección de las víctimas de los conflictos armados, Naciones Unidas y derecho internacional humanitario: desarrollo y aplicación del principio de distinción entre objetivos militares y bienes de carácter civil, Valencia, Tirant Monografías, 2000, 439 pp.

## 2. Field of application

P I, Art. 49

### - SPECIFIC BIBLIOGRAPHY

#### Suggested reading:

- MEYROWITZ Henri, "Une révolution inaperçue: l'article 49(2) du Protocole additionnel I aux Conventions de Genève de 1949", in *Oesterreichische Zeitschrift für öffentliches Recht und Völkerrecht*, Vol. 32, 1981, pp. 29-57.

#### a. acts of violence in defence and offence

### - CASES AND DOCUMENTS

- United States/United Kingdom, Report on the Conduct of the Persian Gulf War

### - SPECIFIC BIBLIOGRAPHY

#### Suggested reading:

- KRETZMER David, "Targeted Killing of Suspected Terrorists: Extra-Judicial Executions or Legitimate Means of Defence?", in *EJIL*, Vol. 16/2, 2005, pp. 171-212

#### b. no matter where, including attacks on the party's own territory under enemy control

### - SPECIFIC BIBLIOGRAPHY

#### Further reading:

KOUTROULIS Vaios, "The Fight Against Islamic State and Jus In Bello", in *Leiden Journal of International Law*, Vol. 29, No. 3, 2016, pp. 827-852.||||

#### c. attacks from land, air or sea affecting the civilian population on land

### - CASES AND DOCUMENTS

- Federal Republic of Yugoslavia, NATO Intervention

**Suggested reading:**

- CANESTARO Nathan, "Legal and Policy Constraints on the Conduct of Aerial Precision Warfare", in Vanderbilt Journal of Transnational Law, Vol. 37/2, 2004, 431-484.
- ROSCINI Marco, "Targeting and Contemporary Aerial Bombardment", in International and Comparative Law Quarterly, Vol. 54, issue 2, 2005, p. 411-444.

**Further readings:**

- BOUCHET-SAULNIER Françoise & WHITALL Jonathan, "An environment conducive to mistakes? Lessons learnt from the attack on the Médecins Sans Frontières hospital in Kunduz, Afghanistan", in IRCC, Vol. 100, No. 907-909, 2019, pp. 337-372.
- BOURBONNIERE Michel, "Law of Armed Conflict (LOAC) and the Neutralization of Satellites or *Ius in bello Satellitis*", in Journal of Conflict and Security Law, Vol. 9, 2004, pp. 43 ff.

### **3. Principles**

**a. only military objectives may be attacked**

(See *infra*, 4. Definition of Military Objectives)

**b. even attacks directed at military objectives are prohibited if the expected incidental effects on the civilian population are excessive**

(See *infra*, Conduct of Hostilities, 6. Prohibited Attacks, c. Indiscriminate Attacks, dd) Principle of Proportionality)

**c. even when an attack directed at a military objective is not expected to have excessive effects on the civilian population, all feasible precautionary measures must be taken to minimize those effects**

(See *infra*, 10. Precautionary measures in attack)

### **4. Definition of military objectives**

P I, Art. 52(2) and (3) [CIHL, Rule 8]

#### **Introductory text**

When the focus of the law on the conduct of hostilities shifted from the prohibition to attack undefended towns and villages [1] to the rule that only military objectives may be attacked, the definition of military

objectives became crucial. The principle of distinction is practically worthless unless at least one of the categories between which the attacker has to distinguish is defined. From the point of view of the philosophy of International Humanitarian Law (IHL), it would have been more satisfactory to define civilian objects. However, because objects become military objectives according to their use by the enemy or potential use by the attacker rather than because of their intrinsic character, it was military objectives that were defined. Indeed, all objects other than those benefiting from special protection [2] can become military objectives. By the same token, it has not been possible to draw up an exhaustive list of military objectives, although such a list would have greatly simplified practical implementation. Most definitions are therefore abstract but provide a list of examples. Protocol I chooses to illustrate its definition with an open-ended list of examples of civilian objects which are presumed not to be military objectives. [3]

Under the definition provided in Article 52(2) of Protocol I, an object [4] must cumulatively [5] meet two criteria to be a military objective.

First, the object, by its “nature, location, purpose or use”, has to contribute effectively to the military action of the enemy. [6] “Nature” refers to the object’s intrinsic character. “Location” admits that an object may be a military objective simply because it is situated in an area that is a legitimate target. Some States have clearly stated that their understanding of the word is that a specific area of land may be a military objective if its total or partial destruction, capture or neutralization in the circumstances ruling at the time offers a definite military advantage. “Purpose” refers to the enemy’s intended future use, based on reasonable belief. “Use” refers to the current function of the object. For example, it is generally agreed that weapons factories and even extraction industries providing raw materials for such factories are military objectives, because they serve the military, albeit indirectly.

Second, the object’s destruction, capture or neutralization has to offer a definite military advantage for the attacking side. [7] According to declarations of understanding made by some States, the military advantage anticipated from an attack refers to the advantage anticipated from the attack considered as a whole, not just from isolated or particular parts of the attack. A direct connection with specific combat operations is not considered to be necessary. An attack as a whole must, however, be a finite event, not to be confused with the entire war.

What counts is that the action and the advantage have to be “military”; the political aim of victory may be achieved through violence only by using violence against military objectives, i.e., by weakening the military potential of the enemy. [8] By characterizing the contribution as “effective” and the advantage as “definite”, the drafters tried to avoid too broad an interpretation of what constitutes a military objective. However, the exact practical implications of those terms are subject to controversy. Both criteria must be fulfilled “in the circumstances ruling at the time”. Without this limitation to the actual situation, the principle of distinction would be void, as every object could in abstracto, in the wake of possible future developments, e.g., if used by enemy troops, become a military objective.

## • CASES AND DOCUMENTS

- ICRC, Protection of civilians against digital threats
- Federal Republic of Yugoslavia, NATO Intervention
- ICRC, The Challenges of Contemporary Armed Conflicts [Part A]
- International Law Commission, Articles on State Responsibility
- United States, War Crimes Act
- France, Accession to Protocol I
- Israel/Gaza, Operation Cast Lead [Part I, paras 101-111, Part II, paras 365-392]
- Israel, The Targeted Killings Case [Paras 40-42]
- Israel, Human Rights Committee's Report on Beit Hanoun [Para. 47]
- Israel/Lebanon/Hezbollah, Conflict in 2006 [Part I, paras 116-117, 140-148]
- Eritrea/Ethiopia, Awards on Military Objectives
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law [Part A.]
- United States/United Kingdom, Report on the Conduct of the Persian Gulf War
- United States, Surrendering in the Persian Gulf War
- United States/United Kingdom, Conduct of the 2003 War in Iraq
- Case Study, Armed Conflicts in the former Yugoslavia [Paras 19 and 27]
- ICTY, The Prosecutor v. Rajic [Part A., para. 54]
- Croatia, Prosecutor v. Rajko Radulovic and Others
- Federal Republic of Yugoslavia, NATO Intervention [Part A., paras 1018; Part B., paras 55 and 71-79]
- Afghanistan, Drug Dealers as Legitimate Targets
- United States, Military Commissions [Para. 5. D.]
- Civil War in Nepal [Part II.]
- Georgia/Russia, Human Rights Watch's Report on the Conflict in South Ossetia [Paras 20-22, 39-40, 58-64]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 31-51]
- Iran - Victim of Cyberwarfare
- Syria, Press conference with French President Francois Hollande and Russian President Vladimir Putin
- Israel/Palestine, Operation Protective Edge (Gaza, 13 June - 26 August 2014)
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [paras 157, 158, 163, 215]
- Libya, Report of the Office of the UN High Commissioner for Human Rights (2014/15)
- Mexico, Recapture of Ovidio Guzmán, One of the Leaders of the Sinaloa Cartel
- The Netherlands, Fighting in the Chora District (Afghanistan)
- United States, The US Plan to Mitigate Civilian Harm in Armed Conflicts

### Suggested reading:

- BOIVIN Alexandra, "The Legal Regime Applicable to Targeting Military Objectives in the Context of Contemporary Warfare", in University Centre for International Humanitarian Law, Research Paper Series, No. 2, 2006, 100 pp.
- DAHL Arne Willy, "Military Objectives by Nature", in Israel Yearbook on Human Rights, Vol. 48, 2018, pp. 1-17.
- DINSTEIN Yoram, "Legitimate Military Objectives Under The Current Jus In Bello", in Israel Yearbook of Human Rights, Vol.31, 2002, pp. 1-34.
- DÖRMANN Knut, "The Definition of Military Objectives", in BERUTO Gian Luca (ed.), The Conduct of Hostilities: Revisiting the Law of Armed Conflict: 100 Years After the 1907 Hague Conventions and 30 Years After the 1977 Additional Protocols: Current Problems of International Humanitarian Law, Sanremo, 6-8 September 2007: Proceedings, Milano, Nagard, 2008, pp. 85-93.
- JAHEC-NEALE Agnieszka, The Concept of Military Objectives in International Law and Targeting Practice, New-York, London, Routledge, 2015, 294 pp.
- MELZER Nils, "The Principle of Distinction Between Civilians and Combatants", in CLAPHAM Andrew & GAETA Paola, The Oxford handbook of international law in armed conflict, Oxford, OUP, 2014, pp. 296-331.
- ROBERTSON Horace B., "The Principle of the Military Objective in the Law of Armed Conflict", in United States Air Force Academy Journal of Legal Studies, vol.8, 1997-1998, pp. 35-70.
- SANDOZ Yves, "La notion d'objectif militaire et les cibles duales", in CHETAIL Vincent (ed.), Permanence et mutation du droit des conflits armés, Bruxelles, Bruylant, 2013, pp. 415-451.
- SASSÒLI Marco, "Targeting: The Scope and Utility of the Concept of Military Objectives for the Protection of Civilians in Contemporary Armed Conflicts", in WIPPMAN David & EVANGELISTA Matthew (eds), New Wars, New Laws? Applying the Laws of War in 21st Century Conflicts, New York, Transnational Publishers, 2005, pp. 181-210.
- SASSÒLI Marco, Legitimate targets of attacks under international humanitarian law, Cambridge, Program on Humanitarian Policy and Conflict Research at Harvard University, 2004, 11 pp.
- SCHMITT Michael, "Targeting in Operational Law", in GILL D. Terry & FLECK Dieter (Eds), Handbook of the International Law of Military Operations, 2nd ed., Oxford, OUP, 2015, pp. 269-306.

### Further readings:

- COTTER Maurice, "Military necessity, proportionality and dual-use objects at the ICTY: a close reading of the Prlic et al. proceedings on the destruction of the Old Bridge of Mostar", in *Journal of Conflict and Security Law*, Vol. 23, No. 2, 2018, pp. 283-305.
- DOUGHERTY Bernard & QUENIVET Noëlle, "Has the Armed Conflict in Iraq Shown once more the Growing Dissension Regarding the Definition of a Legitimate Target?: What and Who can be Lawfully Targeted?", in *Humanitäres Völkerrecht*, Vol. 4, 2003, pp. 188-196.

- FELLOW Satter, "The curious case of civilians working in munitions factories: civilian assumption of risk in armed conflict and the United States' DoD law of war Manual", in *The Military Law and Law of War Review*, Vol. 56, No. 2, 2017, pp. 251-304.
- KOLB Robert, "Humanitarian Bombardments" in *Jus in Bello*, in HEINTZE Hans-Joachim & THIELBORGER Pierre (eds.), *From Cold War to Cyber War, The Evolution of the International Law of Peace and Armed Conflict over the last 25 Years*, London, Springer, 2016, pp. 113-125.
- McCORMACK Tim, "International humanitarian law and the targeting of data", in *International Law Studies*, Vol. 94, 2018, pp. 222-240.
- PLAW Avery, *Targeting Terrorists: A License to Kill?*, Aldershot, Ashgate, 2008, 294 pp.
- SCHMITT Michael, "Targeting and Humanitarian Law: Current Issues", in *IYHR*, Vol. 34, 2004, pp. 59-104.
- SPEROTTO Federico, "Targeted Killings in response to Security Threats: Warfare and Humanitarian Issues", in *Global Jurist*, Vol. 8, No. 3, 2008, pp. 1-32.

## 5. Definition of the civilian population

P I, Art. 50

### Introductory text

The principle of distinction can only be respected if not only the permissible objectives but also the persons who may be attacked are defined. As combatants are characterized by a certain uniformity and civilians by their great variety, [9] Art. 50(1) of Protocol I logically defines civilians by excluding them from the corollary category of combatants: everyone who is not a combatant is a civilian benefiting from the protection provided for by the law on the conduct of hostilities. [10] As will be seen below, civilians only lose their protection from attack and the effects of the hostilities if and for such time as they directly participate in hostilities. [11] The complementarity of the two categories, civilians and combatants, is very important in rendering IHL complete and effective, and thereby ensuring no one may fight but not be fought, or be attacked but not defend himself/herself – a privilege and a sanction which would never be respected and would undermine the whole fabric of IHL in a given conflict.

Recently, some scholars and governments have argued that persons belonging to an armed group failing to fulfil the collective requirements for combatant status (e.g., by not distinguishing themselves from the civilian population or because they do not belong to a party to the international armed conflict) may nevertheless be attacked like combatants and not only, like civilians, when and for such time as they directly participate in hostilities. This argument, which could be invoked to justify acts that would otherwise qualify as extra-judicial executions, is, at a minimum, incompatible with the wording of Art. 50(1) of Protocol I. Because of the difficulties in identifying such persons in the conduct of hostilities, it also puts other civilians at risk.

Thus, under this definition there is no category of “quasi-combatants”, i.e. civilians contributing so fundamentally to the war effort (e.g. workers in ammunition factories) that they lose their civilian status although not directly participating in hostilities. Indeed, in IHL there can logically be no such category. If the civilian population is to be protected, only one distinction is practicable: the distinction between those who (may) directly participate in hostilities, on the one hand, and all others, who do not, may not and cannot militarily hinder the enemy from obtaining control over their country by means of a complete military occupation, no matter what their contribution to the war effort may be otherwise, on the other.

To allow attacks on persons other than combatants would also violate the principle of necessity, because victory can be achieved by overcoming only the combatants of a country – however efficient its armament industry and however genial its politicians may be. All this obviously does not preclude military objectives, such as armament factories, from being attacked; subject to the principle of proportionality – the attack on a military objective does not become unlawful because of the risk that a civilian who works or is otherwise present in it may come to harm during the course of the attack.

If one person so defined is a civilian, any number of such persons constitute the civilian population.

[12] According to proportionality as a general principle of law, the presence of individual non-civilians among a great number of civilians does not deprive the latter of the character of a civilian population, [13] nor does it mean that the non-civilians may not be individually attacked provided that the necessary precautions are taken.

## ▲ CASES AND DOCUMENTS

- Israel/Gaza, Operation Cast Lead [Part I, paras 237-248, Part II, paras 393-437]
- European Court of Human Rights, *Kononov v. Latvia*
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [para. 118]

## ▲ SPECIFIC BIBLIOGRAPHY

### **Suggested reading**

TURNER Lisa & NORTON Lynn G., “Civilians at the Tip of the Spear”, in *Air Force Law Review*, Vol. 51, 2001, pp. 21 ff.

VAN ENGELAND Anicée, *Civilian or Combatant?: A Challenge for the 21st Century*, Oxford, OUP, 2011, 192 pp.

### **Further reading:**

ALIJA FERNANDEZ Rosa Ana & SAURA ESTAPA Jaume, “Towards a Single and Comprehensive Notion of ‘Civilian Population’ in Crimes against Humanity”, in *International Criminal Law Review*, Vol. 17, No. 1, 2017, pp. 47-77.

GUILLORY Michael E., "Civilianizing the Force: Is the United States Crossing the Rubicon?", in *Air Force Law Review*, Vol. 51, 2001, pp. 111 ff.

HLAJKOVA Monika, "Reconstructing the Civilian/Combatant Divide: A Fresh Look at Targeting in Non-international Armed Conflict", in *Journal of Conflict and Security Law*, Vol. 19, No. 2, 2014, pp. 251-278.

#### a. **definition of a civilian**

[See also *infra*, Conduct of Hostilities, II. The protection of the civilian population against the effects of hostilities, 7) Loss of protection: The concept of direct participation in hostilities and its consequences]  
P I, Art. 50(1) [CIHL, Rule 5]

### ▲ CASES AND DOCUMENTS

- Australia/Afghanistan, Inquiry into the Conduct of Australian Defence Forces
- ICRC, Interpretive Guidance on the Notion of Direct Participation in Hostilities
- ICRC Appeals on the Near East [Part C., para. 7]
- Israel, Military Prosecutor v. Kassem and Others [Part II. E. 4]
- Sudan, Report of the UN Commission of Enquiry on Darfur [Paras 291, 292 and 422]
- Case Study, Armed Conflicts in the former Yugoslavia [27]
- ICTY, The Prosecutor v. Tadic [Part B., paras 639 and 640]
- ICTY, The Prosecutor v. Blaskic [Paras 211-214]
- Colombia, Constitutionality of IHL Implementing Legislation [Paras D.3.3.2. and 3.3.2.1., Para. E.1]
- Afghanistan, Code of Conduct for the Mujahideen [Arts 4 and 8]
- Israel, Blockade of Gaza and the Flotilla Incident
- ICTY, The Prosecutor v. Radovan Karadzic
- Mexico, Recapture of Ovidio Guzmán, One of the Leaders of the Sinaloa Cartel
- Colombia, Special Jurisdiction for Peace, Extrajudicial Executions in Casanare

### ▲ SPECIFIC BIBLIOGRAPHY

#### Suggested reading:

- GARBETT Claire, *The Concept of the Civilian. Legal Recognition, Adjudication and the Trials of International Criminal Justice*, Abingdon, New-York, Routledge, 202 pp.
- JOHANSEN Sigrid Redse, "Who is Civilian and When do They Lose Their Protection?", in JOHANSEN Sigrid Redse (ed.), *The Military Commander's Necessity, The Law of Armed Conflicts and its Limits*, Cambridge, CUP, 2019, pp. 207-228.

#### Further readings:

- CRAWFORD Emily, "Who is Civilian? Membership of Opposition Groups and Direct Participation in Hostilities", in SANDS Philippe & LATTIMER Mark (eds.), *The grey zone : civilian protection between*

*human rights and the laws of war*, Oxford, Hart Publishing, pp. 19-40.

- MARQUIS BISSONNETTE Camille, “The Definition of Civilians in Non-International Armed Conflict”, in *Journal of International Humanitarian Legal Studies*, vol. 7, No. 1, 2016, pp. 129-155.

a. the presence of a combatant or a military objective among the civilian population

P I, Art. 50(3)

## ▲ CASES AND DOCUMENTS

- Israel, Evacuation of Bodies in Jenin
- Israel, Human Rights Committee’s Report on Beit Hanoun [Paras 34 and 47]
- Sudan, Report of the UN Commission of Enquiry on Darfur [Paras 263-267]
- Sri Lanka, Conflict in the Vanni [Paras 12-16]
- ICTY, The Prosecutor v. Strugar [Part B., para. 282]

## ▲ SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- JOHN-HOPKINS Michael, “Regulating the Conduct of Urban Warfare: Lessons From Contemporary Asymmetric Armed Conflicts”, in *IRRC*, Vol. 92, No. 878, 2010, pp. 469-493.

## 6. Prohibited attacks

(See also *infra*, Conduct of Hostilities, III. Means and Methods of Warfare)

### Introductory text

Under IHL, lawful methods of warfare are not unlimited. In particular, IHL prohibits certain kinds of attacks. The civilian population may never be attacked; this prohibition includes attacks the purpose of which is to terrorize the population. [14] IHL also proscribes attacks directed at civilian objects. [15] Even those attacks directed at a legitimate military objective [16] are regulated by IHL; such attacks must not be indiscriminate, i.e. the weapons utilized must be capable of being directed at the specific military objective and the means used must be in proportion to the military necessity. [17] The principle of proportionality prohibits attacks, even when directed at a military objective, if they “may be expected 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”. [18] This principle is the inescapable link between the principles of military necessity and humanity, where they pull in opposite directions. Although military advantage, which may be taken into account, is qualified, the principle of proportionality remains very difficult

to apply, and any attempt to weigh the expected military advantage against the anticipated civilian losses or damage to civilian objects is inevitably dependent on subjective value judgements, especially when both probabilities, i.e. gaining the advantage and affecting civilians, can be gauged with less than 100% accuracy.

In addition, if a military objective is targeted and the principle of proportionality is respected, but civilians or civilian objects may nevertheless be affected by the attack, precautionary measures must be taken.

[19] Finally, reprisals against civilians or civilian objects are prohibited under IHL. [20]

## ► CASES AND DOCUMENTS

- United States/Iraq/Military Presence in Iraq
- France, Accession to Protocol I [Part A.]
- United States, President Rejects Protocol I
- United States, Trial of Lieutenant General Haruhei Isayama and Others
- ICRC Appeals on the Near East [Part C., para. 7]
- Eritrea/Ethiopia, Awards on Military Objectives
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law
- Libya, NATO Intervention 2011

## ► SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- KUBLBECK Eva, "The Immunity of Civilians – A Moral and Legal Study of Attacks on the Civilian Population", in *Journal of International Humanitarian Studies*, Vol. 4, No. 2, 2013, pp. 262-295.
- OLASOLO Héctor, *Unlawful Attacks in Combat Situations: from the ICTY's Case Law to the Rome Statute*, Leiden, M. Nijhoff, 2008, 288 pp.
- SALAHI Reem, "Israel's War Crimes: a First Hand Account of Israel's Attacks on Palestinian Civilians and Civilian Infrastructure", in *Rutgers Law Record*, Vol. 36, Fall 2009, pp. 201-223.

### Further readings:

- FENRICK William J., "The Prosecution of Unlawful Attack Cases Before the ICTY", in *Yearbook of International Humanitarian Law*, Vol. 7, 2004, pp. 153-189.
- HESSEL Daniel J., "The Pen and the Sword: International Humanitarian Law Protections for Journalism", in *Yale Journal of International Law*, Vol. 41, No. 2, 2016, pp. 415-457.

### a. attacks against the civilian population as such (including those intended to spread terror)

(See also *supra*, Fundamentals, B. International Humanitarian Law as a Branch of Public International Law, III. International Humanitarian Law: a branch of international law governing the conduct of States

and individuals, 1) Situations of application, C. Other situations, d) acts of terrorism?)

P I, Art. 51(2) [CIHL, Rule 2]

## • CASES AND DOCUMENTS

- Colombia, Response of armed groups to COVID-19
- ICRC Report on Yemen, 1967
- Malaysia, Osman v. Prosecutor
- Belgium, Public Prosecutor v. G.W.
- ICRC Appeals on the Near East [Part C., para. 7]
- Amnesty International, Breach of the Principle of Distinction
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law
- Belgium, Belgian Soldiers in Somalia
- ICTY, The Prosecutor v. Martic [Part A., paras 8, 10-14; Part B, paras 66-71, 472]
- ICTY, The Prosecutor v. Rajic [Part A., paras 51-56.]
- ICTY, The Prosecutor v. Galic [Part A., paras 16-137 and 561-593; Part B, paras 69-104]
- ICTY, The Prosecutor v. Strugar [Part A.; Part B., paras 220-222 and 280-288; Part C, paras 270-272]
- Croatia, Prosecutor v. Rajko Radulovic and Others
- Democratic Republic of the Congo, Conflict in the Kivus [Part III, paras 12-23, 27, 30-34]
- Sierra Leone, Special Court Ruling in the AFRC Case [Part II., paras 660-670]
- Central African Republic, Coup d'Etat
- Somalia, the fate of Children in the conflict
- The armed conflict in Syria
- ICTY, The Prosecutor v. Radovan Karadzic

## • SPECIFIC BIBLIOGRAPHY

### Furder reading:

- SAYAPIN Sergey V., "The Spread of Terror among the Civilian Population: A War Crime?", in *Asia-Pacific Yearbook of International Humanitarian Law*, Vol. 2, 2006, pp. 196-225.

### a. attacks against civilian objects

P I, Art. 52(1) [CIHL, Rule 10]

## • CASES AND DOCUMENTS

- Myanmar, Escalation of the Conflict
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law

- ICTY, The Prosecutor v. Strugar [Part B., paras 223-228 and 282]
- The armed conflict in Syria
- Israel, Blockade of Gaza and the Flotilla Incident
- The Netherlands, Fighting in the Chora District (Afghanistan)

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BART Gregory Raymond, "The Ambiguous Protection of Schools under the Law of War: Time for Parity with Hospitals and Religious Buildings", in *Georgetown Journal of International Law*, Vol. 40, No. 2, 2009, pp. 405-446.
- SASSÒLI Marco & CAMERON Lindsey, "The Protection of Civilian Objects – Current State of the Law and Issues *de lege ferenda*", in RONZITTI Natalino & VENTURINI Gabriella (eds.), *The Law of Warfare: Contemporary Issues*, Utrecht, Eleven, 2006, pp. 35-74.
- SHUE Henry & WIPPMAN David, "Limiting attacks on Dual Use Facilities performing Indispensable Civilian Functions", in *Cornell International Law Journal*, Vol. 35, 2002, pp. 559-579.

### a. indiscriminate attacks

[CIHL, Rule 11]

## - CASES AND DOCUMENTS

- South Africa, Sagarius and Others
- ICRC, Iran/Iraq Memoranda
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law
- United States/United Kingdom, Conduct of the 2003 War in Iraq
- Iraq, Use of Force by United States Forces in Occupied Iraq
- ICTY, The Prosecutor v. Galic [Part A, paras 57-61 and 372-387]
- ECHR, Isayeva v. Russia
- Georgia/Russia, Human Rights Watch's Report on the Conflict in South Ossetia [Paras 21-22]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 71-73]
- The armed conflict in Syria
- ICTY, The Prosecutor v. Gotovina and Markač
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2011
- Autonomous Weapon Systems
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [paras 245, 255-256, 261]

## ► SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- CASSESE Antonio, "The Prohibition of Indiscriminate Means of Warfare", in AKKERMANN Robert J. (ed.), *Declarations on Principles, A Quest for Universal Peace*, Liber Amicorum Discipulorumque Prof. Dr Bert V.A. Röling, Leiden, 1977, pp. 171-194.
- TOWNLEY Stephen, "Indiscriminate Attacks and the Past, Present, and Future of the Rules/Standards and Objective/ Subjective Debates in International Humanitarian Law", in *Vanderbilt Journal of Transnational Law*, 2017, Vol. 50, pp. 1223-1279.

### Further readings:

- BLIX Hans, "Area Bombardment: Rules and Reasons", in *British Yearbook of International Law*, Vol. 49, 1978, pp. 31-69.
- CARNAHAN Burrus, "'Linebacker II' and Protocol I: The Convergence of Law and Professionalism", in *American University Law Review*, Vol. 31/4, 1982, pp. 861-870.
- EVANGELISTA Matthew & SHUE Henry, *The American Way of Bombing: Changing Ethical and Legal Norms, From Flying Fortresses to Drones*, London, Cornell University Press, 2014, 316 pp.
- MEYROWITZ Henri, "Le bombardement stratégique d'après le Protocol I aux Conventions de Genève", in *ZaöRV*, Vol. 41, 1981, pp. 1-68.
- PARKS William H., "Conventional Aerial Bombing and the Law of War", in *United States Naval Institute Proceedings*, Vol. 108, No. 951, 1982, pp. 98-117.

aa) attacks not directed at a specific military objective

P I, Art. 51(4)(a) [CIHL, Rule 12(a)]

### ► CASES AND DOCUMENTS

- Israel, Operation Cast Lead [Part II, paras 365-392]
- Israel, Human Rights Committee's Report on Beit Hanoun [Para. 34]
- Israel/Lebanon/Hezbollah, Conflict in 2006 [Part I, paras 116-117, 140-148]

bb) use of weapons which cannot be directed at a specific military objective

P I, Art. 51(4)(b) [CIHL, Rule 12(b)]

### ► CASES AND DOCUMENTS

- United States/United Kingdom, Report on the Conduct of the Persian Gulf War

- ICTY, The Prosecutor v. Martic [Part B, paras 303-313, 461-463, 470 and 472; Part C, 248]
- Georgia/Russia, Human Rights Watch's Report on the Conflict in South Ossetia [Paras 65-74]
- ICTY, The Prosecutor v. Gotovina and Markač
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [paras 291-292]

cc) treating different military objectives as a single military objective

P I, Art. 51(5)(a) [CIHL, Rule 13]

## ▲ CASES AND DOCUMENTS

- ICTY, The Prosecutor v. Gotovina and Markač

dd) principle of proportionality

(See also *supra*, Fundamentals of IHL, D. Sources of Contemporary International Humanitarian Law, III. Fundamental principles of International Humanitarian Law, 2) Principles of International Humanitarian Law, c) proportionality)

P I, Art. 51(5)(b) [CIHL, Rule 14]

- also covers reasonably foreseeable incidental effects

## ▲ CASES AND DOCUMENTS

- ICRC, The Challenges of Contemporary Armed Conflicts
- ICJ, Nuclear Weapons Advisory Opinion [Para. 43]
- Israel/Gaza, Operation Cast Lead [Part I, paras 120-126, 230-232]
- Israel, The Targeted Killings Case [Paras 40-46]
- Israel, Human Rights Committee's Report on Beit Hanoun [Paras 38-42]
- United States/United Kingdom, Report on the Conduct of the Persian Gulf War
- ICTY, The Prosecutor v. Kupreskic *et al.* [Para. 526]
- Federal Republic of Yugoslavia, NATO Intervention [Part A., paras 4, 18-19 and Part B., paras 75-78]
- Afghanistan, Drug Dealers as Legitimate Targets
- Afghanistan, Goatherd Saved from Attack
- Afghanistan, Assessment of ISAF Strategy
- Civil War in Nepal [Part II.]
- ECHR, Isayeva v. Russia
- Georgia/Russia, Human Rights Watch's Report on the Conflict in South Ossetia [Paras 28-30, 41-47]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 66-67]

- Iran - Victim of Cyberwarfare
- ICTY, The Prosecutor v. Gotovina and Markač
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2011
- Autonomous Weapon Systems
- Israel/Palestine, Operation Protective Edge (Gaza, 13 June - 26 August 2014)
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [paras 155, 160, 168, 179, 294-295]

## • SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- DINSTEIN Yoram, "Collateral Damage and the Principle of Proportionality", in WIPPMAN David & EVANGELISTA Matthew (eds), *New Wars, New Laws? Applying the Laws of War in 21st Century Conflicts*, New York, Transnational Publishers, 2005, pp. 211-224.
- DINSTEIN Yoram, "The Principle of Proportionality", in LARSEN MUJEZINOVIC Kjetil, COOPER GULDHAL Camilla & NYSTUEN Gro (Eds.), *Searching for a 'Principle of Humanity' in International Humanitarian Law*, Cambridge, CUP, 2012, pp. 72-85.
- CORN Geoffrey & CULLIVER Andrew, "Wounded Combatants, Military Medical Personnel, and the Dilemma of Collateral Risk", in *Georgia Journal of International and Comparative Law*, Vol. 45, No. 3, 2017, pp. 445-473.
- DILL Janina, *Applying the Principle of Proportionality in Combat Operations*, Oxford, Oxford Institute for Ethics, Law and Armed Conflict, 2010.
- GARDAM Judith, *Necessity, Proportionality and the Use of Force by States*, Cambridge, CUP, 2004, 259 pp.
- GARDAM Judith, "The Proportionality as a Restraint on the Use of Force", in *AYIL*, Vol. 20, 1999, pp. 161-173.
- GISEL Laurent (ed.), *The Principle of Proportionality in the Rules Governing the Conduct of Hostilities Under International Humanitarian Law*, Genève, Québec, ICRC, Université Laval, 2016, 82 pp.
- HENDERSON Ian & REECE Kate, "Proportionality Under International Humanitarian Law (IHL): The 'Reasonable Military Commander' Standard and Reverberating Effects", in *Vanderbilt Journal of Transnational Law*, Vol. 51, No. 3, 2018, pp. 835-856.
- HOLLAND Joseph, "Military Objective and Collateral Damage: their Relationship and Dynamics", in *Yearbook of International Humanitarian Law*, Vol. 7, 2004, pp. 35-78.
- KREß Claus & LAWLESS Robert, *Necessity and Proportionality in International Peace and Security Law*, Oxford, OUP, 2020, 526 pp.
- WATKIN Kenneth, "Assessing Proportionality: Moral Complexity and Legal Rules", in *Yearbook of International Humanitarian Law*, Vol. 8, 2005, pp. 3-53.

### Further readings:

- BARBER Rebecca J., "The Proportionality Equation: Balancing Military Objectives with Civilian Lives in the Armed Conflict in Afghanistan", in *Journal of Conflict and Security Law*, Vol. 15, No. 3, Winter 2010, pp. 467-500.
- BROWN Bernard L., "The Proportionality Principle in the Humanitarian Law of Warfare: Recent Efforts at Codification", in *Cornell International Law Journal*, Vol. 10, 1976, pp.134-155.
- BYRON Christine, "International humanitarian law and bombing campaigns: legitimate military objectives and excessive collateral damage", in *Yearbook of International Humanitarian Law*, Vol. 13, 2011, pp. 175-211.
- CANNIZZARO Enzo, "Contextualizing Proportionality: Jus ad Bellum and Jus in Bello in the Lebanese War", in *International Review of the Red Cross*, Vol. 88, No. 864, December 2006, pp. 779-792.
- COHEN Amichai, "The Lebanon War and the Application of the Proportionality Principle", in *Hebrew University International Law Research Paper*, Nos. 6-7, April 2007, 26 pp.
- COHEN Amichai, "The Principle of Proportionality in the Context of Operation Cast Lead: Institutional Perspectives", in *Rutgers Law Record*, Vol. 35, 2009, pp. 23-38.
- FENRICK William J., "The Law Applicable to Targeting and Proportionality after Operation Allied Force: A View from the Outside", in *Yearbook of International Humanitarian Law*, Vol. 3, 2000, pp. 5380.
- FENRICK William J., "The Rule of Proportionality and Protocol I in Conventional Warfare", in *Military Law Review*, Vol. 98, 1980, pp. 541-595.
- FENRICK William J., "Targeting and Proportionality during the NATO Bombing Campaign against Yugoslavia", in *European Journal of International Law*, Vol. 12/3, 2001, pp. 489-502.
- GUISÁNDEZ GÓMEZ Javier, "El principio de la proporcionalidad y los daños colaterales, un enfoque pragmático", in PRIETO SANJUÁN Rafael A. (ed.), *Conducción de hostilidades y derecho internacional humanitario*, Medellín, Biblioteca jurídica Diké, 2007, pp. 197-243.
- HILPOLD Peter, "Symposium: The International Legal Fallout from Kosovo" in *EJIL*, Vol. 12/3, 2001, pp. 391-536.
- KNOOPS Geert-Jan Alexander, "The Duality of the Proportionality Principle within Asymmetric Warfare and Ensuing Superior Criminal Responsibilities", in *International Criminal Law Review*, Vol. 9, No. 3, 2009, pp. 501-529.
- KRÜGER-SPRENGEL Friedhelm, "Le concept de proportionnalité dans le droit de la guerre. Rapport présenté au Comité pour la protection de la vie humaine dans les conflits armés, VIIIe Congrès de la Société internationale de droit pénal militaire et de droit de la guerre", in *RDMDG*, Vol. 19, 1980, pp. 177-204.
- MEDENICA Olivera, "Protocol I and Operation Allied Force: did NATO Abide by Principles of Proportionality?", in *Loyola of Los Angeles International and Comparative Law Review*, Vol. 23, 2001, pp. 329-426.
- NEUMAN Noam, "Applying the Rule of Proportionality: Force Protection and Cumulative Assessment in International Law and Morality", in *Yearbook of International Humanitarian Law*, Vol. 7 (2004), 2006, pp. 79-113.
- PARKER Tom, "The Proportionality Principle in the War on Terror", in *Hague Yearbook of*

*International Law*, Vol. 15, 2002, pp. 3-15.

- PHILIPPE Xavier, "Brèves réflexions sur le principe de proportionnalité en droit humanitaire", in *En hommage à Francis Delpérée : itinéraires d'un constitutionnaliste*, Mélanges No. 44, Brussels, Bruylant, 2007, pp. 1183-1196.
- REYNOLDS Jefferson, "Collateral Damage on the 21st Century Battlefield: Enemy Exploitation of the Law of Armed Conflict and the Struggle for a Moral High Ground", in *Air Force Law Review*, Vol. 56, 2005, 169 pp.
- VAN DEN BOOGAARD Jeroen, "Proportionnalité and Autonomous Weapons Systems", in *Journal of International Humanitarian Studies*, Vol. 6, No. 2, 2015, pp. 247-283.
- VENTURINI Gabriella, *Necessità proporzionalità nell'uso della forza militare in diritto internazionale*, Milano, Giuffrè, 1988, 189 pp.

#### a. attacks against the civilian population (or civilian objects) by way of reprisals

(See *infra* State Responsibility 2. Consequences of Violations c. Applicability of The General Rules on State Responsibility ee) Admissibility of Reprisals)

P I, Art. 51(6) and 52(1)

#### ▲ CASES AND DOCUMENTS

- United Kingdom and Australia, Applicability of Protocol I [Part C]
- United States, President Rejects Protocol I
- ICRC, Iran/Iraq Memoranda
- ICTY, The Prosecutor v. Martic [Part A, paras 15-17; Part B, 464-468; Part C., para. 268]
- ICTY, The Prosecutor v. Kupreskic et al. [Paras 527-536]
- Democratic Republic of the Congo, Conflict in the Kivus [Part III, paras 12-23, 37]
- Israel, Blockade of Gaza and the Flotilla Incident
- European Court of Human Rights, Kononov v. Latvia

## 7. Loss of protection: The concept of direct participation in hostilities and its consequences

P I, Art. 51(3); PII, Art. 13(3) [CIHL, Rule 6]

### Introductory text

The concept of "direct participation in hostilities" is a cornerstone of the IHL on the conduct of hostilities, and its practical importance has grown as armed conflicts have become "civilianized". [21] Both in international

and non-international armed conflicts, civilians lose their protection against attacks (and their protection against the incidental effects of attacks, afforded to the civilian population as a whole) if and for such time as they participate directly in hostilities. [22] Neither treaty nor customary law defines this concept. After a broad consultation of experts revealed an absence of agreement on certain crucial points, the ICRC tried to clarify several concepts in an “Interpretive Guidance”: [23] who is covered as a “civilian” by the rule prohibiting attacks except in case of direct participation; what conduct amounts to direct participation; the duration of the loss of protection; the precautions to be taken and the types of protection afforded in case of doubt; the rules governing attacks against persons who take direct part in hostilities; and the consequences of regaining protection. The first issue is probably the most controversial.

**In international armed conflicts**, treaty law is clear that everyone who is not a combatant is a civilian benefiting from protection against attacks except if he or she takes a direct part in hostilities. Members of the armed forces of a party to the international armed conflict who lost their combatant status (e.g., because they did not distinguish themselves from the civilian population) may also reasonably be excluded. Some scholars also exclude members of armed groups that do not belong to a party to the international armed conflict. In our view, such “fighters” are either civilians or covered by the rule applicable to a parallel non-international armed conflict, discussed below.

**In non-international armed conflicts**, the absence of any mention of “combatants” might lead one to deduce that everyone is a civilian and that no one may be attacked unless they directly participate in hostilities. However, this would render the principle of distinction meaningless and impossible to apply. In addition, common Article 3 confers protection on “persons taking no active part in hostilities, including members of armed forces who have laid down their arms or are otherwise *hors de combat*”. The latter part of the phrase suggests that for members of armed forces and groups, it is not sufficient to no longer take active part in hostilities to be immune from attack. They must take additional steps and actively disengage. On a more practical level, to prohibit government forces from attacking clearly identified fighters unless (and only while!) the latter engage in combat against government forces is militarily unrealistic, as it would oblige them to react rather than to prevent, while facilitating hit-and-run operations by the rebel group. These arguments may explain why the Commentary on Protocol II considers that “[t]hose belonging to armed forces or armed groups may be attacked at any time.” [24]

There are two ways of conceptualizing this conclusion. First, “direct participation in hostilities” can be understood to encompass the simple fact of remaining a member of the group or of keeping a fighting function in such a group. Second, members of armed groups, or, as the ICRC Interpretive Guidance suggests, those members of an armed group whose specific function is continuously to commit acts that constitute direct participation in hostilities, may not be considered “civilians” (and therefore do not benefit from the rules that protect them against attacks unless and for such time as they directly participate in hostilities). The latter suggestion ensures that membership of the armed group is distinguished from simple affiliation with a party to the conflict for which the group is fighting – in other words, membership of the

political, educational or humanitarian wing of a rebel movement. In every case, however, in practice the difficult question arises as to how government forces are to determine (fighting) membership in an armed group while the individual in question does not commit hostile acts.

As for the question about what conduct amounts to “direct participation”, the ICRC Interpretive Guidance concludes, based on a broad agreement among experts, that the following criteria must be cumulatively met in order to classify a specific act as direct participation in hostilities:

1. "the act must be likely to adversely affect the military operations or military capacity of a party to an armed conflict or, alternatively, to inflict death, injury, or destruction on persons or objects protected against direct attack (threshold of harm);
2. there must be a direct causal link between the act and the harm likely to result either from that act, or from a coordinated military operation of which that act constitutes an integral part (direct causation);
3. the act must be specifically designed to directly cause the required threshold of harm in support of a party to the conflict and to the detriment of another (belligerent nexus)."

## ▲ CASES AND DOCUMENTS

- ICRC, Protection of civilians against digital threats
- Australia/Afghanistan, Inquiry into the Conduct of Australian Defence Forces
- ICRC, The Challenges of Contemporary Armed Conflicts
- ICRC, Interpretative Guidance on the Notion of Direct Participation in Hostilities
- ECHR, Korbely v. Hungary
- Israel, The Targeted Killings Case [Paras 24-40]
- Israel, Detention of Unlawful Combatants [Part A., paras 13 and 21; Part B.]
- Inter-American Commission on Human Right, Tablada [Paras 178 and 189]
- ICC, The Prosecutor v. Thomas Lubanga Dyilo [Paras 259-267]
- Colombia, Constitutionality of IHL Implementing Legislation [Paras D. 3.3.1.-5.4.3., Para. E.1]
- Afghanistan, Drug Dealers as Legitimate Targets
- Afghanistan, Code of Conduct for the Mujahideen [Arts 7-9, 20-21]
- United States, Military Commissions
- United States, The Obama Administration’s Internment Standards
- Civil War in Nepal [Part II]
- ECHR, Khatsiyeva v. Russia [Paras 132-138]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 48-51]
- Mali, Conduct of Hostilities
- Engaging Non-state Armed Groups on the Protection of Children
- Syria, Code of Conduct of the Free Syrian Army
- Malaysia/Philippines, Conflict over the Sultanate of Sulu
- US: Obama’s Speech on Drone Policy

- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2011
- Israel, Blockade of Gaza and the Flotilla Incident
- European Court of Human Rights, Kononov v. Latvia
- General Assembly, The use of drones in counter-terrorism operations
- U.S., Lethal Operations against Al-Qa'ida Leaders
- United States of America, The Death of Osama bin Laden
- Private Military Security Companies
- Syria, Press conference with French President Francois Hollande and Russian President Vladimir Putin
- Mexico, Recapture of Ovidio Guzmán, One of the Leaders of the Sinaloa Cartel
- Switzerland, Voluntary Report on Implementation of IHL
- Colombia, Special Jurisdiction for Peace, Extrajudicial Executions in Casanare
- Somalia, The Death of Bilal Al-Sudani

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BOOTHBY Bill, ““And for Such Time as”: The Time Dimension to Direct Participation in Hostilities”, in *Journal of International Law and Politics*, Vol. 42, No. 3, 2010, pp. 741-768.
- CAMINS Emily, “The Past as Prologue: the Development of the ‘Direct Participation’ Exception to Civilian Immunity”, in *IRRC*, Vol. 90, No. 872, 2008, pp. 853-881.
- CRAWFORD Emily, *Identifying the Enemy, Civilian Participation in Armed Conflict*, Oxford, OUP, 2015, 288 pp.
- DINSTEIN Yoram, “Distinction and Loss of Civilian Protection in International Armed Conflicts”, in *IYHR*, Vol. 38, 2008, pp. 1-16.
- GEHRING Robert W., “Loss of Civilian Protections under the Fourth Geneva Convention and Protocol I”, in *Military Law Review*, Vol. 90, 1980, pp. 49-88.
- GOODMAN Ryan [et al.], “The ICRC Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law”, in *Journal of International Law and Politics*, Vol. 42, No. 3, 2010, pp. 637-916.
- HENRY Sabrina, “Exploring the 'continuous combat function' concept in armed conflicts: time for an extended application?”, in *IRRC*, Vol. 100, No. 907, 2018, pp. 267-285.
- KLEFFNER Jann K., “From “Belligerents” to “Fighters” and Civilians Directly Participating in Hostilities: on the Principle of Distinction in Non-International Armed Conflicts One Hundred Years After the Second Hague Peace Conference”, in *Netherlands International Law Review*, Vol. 54, No. 2, 2007, pp. 315-336.

### Further reading:

- AKANDE Dapo, “Clearing the Fog of War?: The ICRC’s Interpretive Guidance on Direct Participation

in Hostilities", in *ICLQ*, Vol. 59, Part 1, January 2010, pp. 180-192.

- BAILEY Christopher E., "Cyber Civilians as Combatants", in *Creighton International and Comparative Law Journal*, Vol. 8, No. 1, 2016, pp. 4-22.
- CORN Geoffrey S., "Unarmed But How Dangerous? Civilian Augmentees, the Law of Armed Conflict, and the Search for a More Effective Test for Permissible Civilian Battlefield Functions", in *Journal of National Security Law and Policy*, Vol. 2, No. 2, 2008, pp. 257-295.
- GARRAWAY Charles, "Direct Participation and the Principle of Distinction: Squaring the Circle", in SUMMERS James, HARVEY Caroline & WHITE Nigel D. (eds.), *Contemporary challenges to the laws of war : essays in honour of professor Peter Rowe*, Cambridge, CUP, 2014, pp. 169-190.
- HAMPSON Françoise J., "Direct Participation in Hostilities and the Interoperability of the Law of Armed Conflict and Human Rights Law", in *International Law Studies*, Vol. 87, 2011, pp. 187-213.
- KRETZMER David, "Targeted Killing of Suspected Terrorists: Extra-Judicial Executions or Legitimate Means of Defence?", in *EJIL*, Vol. 16/2, 2005, pp. 171-212.
- LUEDTKE Morgan, "The expansion of DPH regarding emerging technological weapons", in *Oregon Review of International Law*, Vol. 20, No. 2, 2019, pp. 503-530.
- LYALL Rewi, "Voluntary Human Shields, Direct Participation in Hostilities and the International Humanitarian Law Obligations of States", in *Melbourne Journal of International Law*, Vol. 9, Issue 2, May 2008, 21 pp.
- MELZER Nils, "Keeping the Balance between Military Necessity and Humanity: A Response to Four Critiques of the ICRC's Interpretive Guidance on the Notion of Direct Participation in Hostilities", in *Journal of International Law and Politics*, Vol. 42, No. 3, 2010, pp. 831-916.
- MELZER Nils, "Targeted Killing or Less Harmful Means? Israel's High Court Judgment on Targeted Killing and the Restrictive Function of Military Necessity", in *YIHL*, Vol. 9, 2009, pp. 87-116.
- OUÉDRAOGO Touwendé Roland, "La distinction entre la participation directe aux hostilités par les civils et la légitime défense des civils", in *RQDI*, No. 29.2, 2016, pp. 191-223.
- SASSÒLI Marco, "The International Legal Framework for Stability Operations: When May International Forces Attack or Detain Someone in Afghanistan?", in *IYHR*, Vol. 39, 2009, pp. 177-212.
- STEPHENS Dale, LEWIS Angeline, "The Targeting of Contractors in Armed Conflict", in *YIHL*, Vol. 9, 2006, pp. 25-64.
- SCHMITT Michael N., "Deconstructing Direct Participation in Hostilities: the Constitutive Elements", in *Journal of International Law and Politics*, Vol. 42, No. 3, 2010, pp. 697-739.

## 8. The civilian population is not to be used to shield military objectives

P I, Art. 51(7) [CIHL, Rule 97]

### Introductory text

IHL prohibits attacks against the civilian population and civilian objects. [25] IHL also prohibits abuse of this

prohibition: civilians, the civilian population and certain specially protected objects may not be used to shield a military objective from attack. [26] The decisive factor for distinguishing the use of human shields from non-compliance with the obligation to take passive precautions [27] is whether the intermingling between civilians and combatants, and/or military objectives, is the result of the defender's specific intention to obtain "protection" for its military forces and objectives, or simply of a lack of care for the civilian population.

If the defender violates the prohibition to use human shields, the "shielded" military objectives or combatants do not cease to be legitimate objects of attack merely because of the presence of civilians or protected objects. [28] It is generally agreed that involuntary human shields nevertheless remain civilians. Care must therefore be taken to spare them when attacking a legitimate objective. [29] In an extreme case, if the anticipated incidental loss of life or injury among involuntary human shields is excessive in relation to the concrete and direct military advantage expected from attacking the military objective or combatants, an attack directed against the latter may become unlawful. [30] The status of voluntary human shields is more controversial. Some consider that acting as voluntary human shields constitutes direct participation in hostilities, which would cause the persons concerned to lose protection against the effects of hostilities while they act as human shields. Others object, first, that in order to classify an act as direct participation, the act must provoke, through a physical chain of causality, harm to the enemy or its military operations. Human shields are a moral and legal rather than physical means to an end: to hinder the enemy from attacking. Second, the theory considering voluntary human shields as civilians directly participating in hostilities is self-defeating. If it were correct, the presence of human shields would not have any legal impact on the ability of the enemy to attack the shielded objective – but an act which cannot have any impact whatsoever upon the enemy cannot possibly be classified as direct participation in hostilities. Third, the distinction between voluntary and involuntary human shields refers to a factor, i.e. the voluntary involvement of the target, which is very important in criminal law and, to a lesser extent, in law enforcement operations, but is completely irrelevant in IHL. A soldier of a country with universal compulsory military service is just as much (and for just as long) a legitimate target as a soldier who is a member of an all-volunteer army. Fourth, the distinction is not practicable. How can a pilot or soldier launching a missile know whether the civilians he observes around a military objective are there voluntarily or involuntarily? What counts as a voluntary presence? Fifth, in a self-applied system like that of IHL during armed conflict, the suggested loss of protection against attacks may prompt an attacker to invoke the prohibition to use human shields abusively, as an alibi, as a mitigating circumstance or "to ease his conscience".

## • CASES AND DOCUMENTS

- Israel/Gaza, Operation Cast Lead [Part I, paras 151-169; Part II, paras 439-498]
- Israel, The Targeted Killings case
- Israel, Human Rights Committee's Report on Beit Hanoun [Para. 34]
- Israel/Lebanon/Hezbollah, Conflict in 2006 [Part II, paras 6-11]
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian

Law [Parts C. and D.]

- United States/United Kingdom, Report on the Conduct of the Persian Gulf War
- Sri Lanka, Conflict in the Vanni [Paras 3-9]
- Democratic Republic of the Congo, Conflict in the Kivus [Part III, paras 24-26]
- ECHR, Isayeva v. Russia [Paras 15, 23, 25-26, 69-70]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 79-82]
- Israel/Palestine, Operation Protective Edge (Gaza, 13 June - 26 August 2014)
- Sri Lanka, Naval War against Tamil Tigers

## ► SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BOUCHIE de BELLE Stéphanie, "Chained to Cannons or Wearing Targets on Their T-Shirts: Human Shields in International Humanitarian Law", in *IRRC*, Vol. 90, No. 872, 2008, pp. 883-906.
- SASSÒLI Marco, "Human Shields and International Humanitarian Law", in *Frieden in Freiheit = Peace in Liberty = Paix en liberté, Festschrift für Michael Bothe zum 70 Geburtstag*, Baden-Baden, Nomos, 2008, pp. 567-578.
- SASSÒLI Marco, "The obligation to take feasible passive precautions and the prohibition of the use of human Shields: can military considerations, including force protection, justify not to respect them?" in *Collegium 46 (Autumn 2016), Proceedings of the Bruges Colloquium, Urban Warfare*, 15-16 October 2015, pp. 76-85.
- SCHMITT Michael N., "Human Shielding from the Attacker's Perspective", in BERUTO Gian Luca (ed.), *The Conduct of Hostilities: Revisiting the Law of Armed Conflict: 100 Years After the 1907 Hague Conventions and 30 Years After the 1977 Additional Protocols: Current Problems of International Humanitarian Law*, Sanremo, 6-8 September 2007: Proceedings, Milano, Nagard, 2008, pp. 93-102.
- SCHMITT Michael N., "Human Shields in International Humanitarian Law", in *IYHR*, Vol. 38, 2008, pp. 17-58.

### Further reading:

- ARTZ Margaret T., "A Chink in the Armor: How a Uniform Approach to Proportionality Analysis Can End the Use of Human Shields", in *Vanderbilt Journal of Transnational Law*, Vol. 45, No. 5, 2012, pp. 1447-1487.
- BALLESTERO Manon, "Les boucliers humains volontaires : des civils ne participant pas directement aux hostilités?", in *RBDI*, Vol. 41, No. 1-2, 2008, pp. 265-291.
- FISCHER Douglas H., "Human Shields, Homicides, and House Fires: How a Domestic Law Analogy Can Guide International Law Regarding Human Shield Tactics in Armed Conflict", in *American University Law Review*, Vol. 57, No. 2, 2007, pp. 479-521.

- OTTO Roland, "Neighbours as Human Shields? The Israel Defense Forces' 'Early Warning Procedure' and International Humanitarian Law", in *IRRC*, No. 856, December 2004, pp. 771-786.
- ROSEN Richard D., "Targeting Enemy Forces in the War on Terror: Preserving Civilian Immunity", in *Vanderbilt Journal of Transnational Law*, Vol. 42, No. 3, May 2009, pp. 683-777.

## 9. Protected objects

### Introductory text

In order to further safeguard the civilian population during armed conflicts, IHL protects specific objects from attack. It prohibits attacks against civilian objects, which are all objects not defined as military objectives; [31] thus, a civilian object is one failing to contribute to military action because of, for example, its location or function, and because its destruction would provide no military advantage.

In addition, IHL grants some objects, most of which are civilian objects anyway, special protection. In addition to the general protection afforded to them as civilian objects, special protection means that these objects may not be used for military purposes by those who control them and should therefore never become military objectives under the two-pronged test of the definition of military objectives. Second, even if they meet the test and are effectively used for military purposes, specially protected objects may only be attacked under restricted circumstances and following additional precautionary measures. For each category, the specific rules on these issues are different.

Specially protected objects include: cultural objects; [32]

#### Conventions on the Protection of Cultural Property

]; P I, Arts 53 and 85(4); P II, Art. 16; Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict, March 26, 1999 [See

#### Conventions on the Protection of Cultural Property

]. See also *infra*Conduct of Hostilities, II. The protection of the civilian population against the effects of hostilities, 9) Protected objects, b. specially protected objects, aa) cultural objects objects indispensable for the survival of the civilian population, such as water; [33] works and installations containing dangerous forces (e.g., dams, dykes and nuclear electrical power generating stations). Attacks against military objectives located in the vicinity of such installations are also prohibited when they would cause sufficient damage to endanger the civilian population. [34] The special protection of these works and installations ceases only under limited circumstances. [35] The environment (made up of civilian objects) also benefits from special protection. Means or methods of warfare with the potential to cause widespread, long-term, and severe damage to the environment are prohibited. [36] Medical equipment (including transport used for medical purposes) is a final group of specially protected objects against which attack is prohibited. [37]

a. **civilian objects**

P I, Art. 52(1) [CIHL, Rule 9]

▲ **CASES AND DOCUMENTS**

- Israel, House Demolitions in the Occupied Palestinian Territory [Parts D and E]
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law
- ICTY, The Prosecutor v. Rajic [Part A., paras 39 and 42]
- ICTY, The Prosecutor v. Strugar [Part B., para. 282]
- Croatia, Prosecutor v. Rajko Radulovic and Others
- Afghanistan, Operation "Enduring Freedom" [Part B.]
- Afghanistan, Code of Conduct for the Mujahideen [Arts 19-21, 23-25, 52-53-58]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 37-47, 94-109]
- Libya, NATO Intervention 2011
- Iraq, Forced displacement and deliberate destruction
- Colombia, Special Jurisdiction for Peace, Crimes against the Environment in Cauca

▲ **SPECIFIC BIBLIOGRAPHY**

**Suggested reading:**

- JIA Bing Bing, "Protected Property' and its Protection in International Humanitarian Law", in Leiden Journal of International Law, Vol. 15/1, 2002, pp. 131-153.
- SASSÒLI Marco & CAMERON Lindsey, "The Protection of Civilian Objects Current State of the Law and Issues de Lege Ferenda", in RONZITTI Natalino & VENTURINI Gabriella (eds), Current Issues in the International Humanitarian Law of Air Warfare, Utrecht, Eleven, 2005, pp. 35-74.

a. **specially protected objects**

aa) cultural objects

P I, Art. 53 [CIHL, Rules 38-40]

"Total wars", inter-religious strife and inter-ethnic conflicts are increasingly marked by the destruction of civilian objects, in particular cultural objects. Experience unfortunately shows that, far from being accidental or mere collateral damage, such destruction is very often clearly deliberate and part of the war effort.

The first attempts to protect cultural objects against the effects of war date back to the adoption of Hague Convention IV of 1907. This protection has been considerably developed in the Hague Convention for the

Protection of Cultural Property in the event of Armed Conflict and its 1954 and 1999 Protocols, in the 1949 Geneva Conventions and in Additional Protocols I and II of 1977.

Cultural objects are defined as “movable or immovable property of great importance to the cultural heritage of every people” (which include in particular monuments of architecture, archaeological sites, works of art, scientific collections and collections of books or archives) and as “buildings whose main and effective purpose is to preserve or exhibit movable cultural property” (such as museums, libraries or refuges intended to shelter cultural property).

On the basis of provisions applicable in both international and non-international armed conflicts, States parties are required to safeguard and respect cultural objects. Safeguarding comprises all the preventive measures to be taken in peacetime (which include the obligations to list, signal and mark the cultural objects with a distinctive emblem). Respect for cultural objects implies refraining from attacking them and prohibiting any form of pillage or destruction.

Considered as civilian objects under special protection, cultural objects must not be attacked and may not be used for military purposes. Even if they are, they do not automatically become legitimate military objectives. Their immunity may only be waived in cases of “imperative military necessity”.

In spite of the many detailed provisions designed to guarantee their protection, cultural objects are still often collateral victims of modern conflicts. In most cases, their irreparable destruction often constitutes a serious obstacle to the restoration of normal relations between former belligerents.

## ▲ CASES AND DOCUMENTS

- Conventions on the Protection of Cultural Property
- France, Accession to Protocol I [Part B., para. 13]
- Israel, Taking Shelter in Ancient Ruins
- Israel/Lebanon/Hezbollah, Conflict in 2006 [Part I, paras 188-192]
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law [Part A., Annex, para. 50]
- United States/United Kingdom, Report on the Conduct of the Persian Gulf War
- ICTY, The Prosecutor v. Strugar [Part B., paras 229-233 and 298-329]
- Colombia, Constitutionality of IHL Implementing Legislation [Paras 3, and E.3]
- Afghanistan, Destruction of the Bamiyan Buddhas
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 52-55]
- Cambodia/Thailand, Border Conflict around the Temple of Preah Vihear
- Mali, Destruction of World Cultural Heritage
- Mali, Accountability for the Destruction of Cultural Heritage

- Syria, Destruction of Cultural Heritage
- Colombia, Special Jurisdiction for Peace, Crimes against the Environment in Cauca

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- DESCH Thomas, "The Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict", in *YIHL*, Vol. 2, 1999, pp. 63-90.
- DRIVER Mark C., "The Protection of Cultural Property During Wartime", in *Review of European Community & International Environmental Law*, Vol. 9/1, 2000, pp. 1-12.
- HENCKAERTS Jean-Marie, "New Rules for the Protection of Cultural Property in Armed Conflict: The Significance of the Second Protocol to the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict", in *Humanitäres Völkerrecht*, Vol. 12/3, 1999, pp. 147-154.
- HLADIK Jan, "Protection of Cultural Property: the Legal Aspects", in JACQUES Richard B. (ed.), "Issues in International Law and Military Operations", in *International Law Studies*, Vol. 80, 2006, pp. 319-331.
- ICRC, "Special issue: Protection of cultural property in armed conflict", in *IRRC*, No. 854, June 2004, pp. 311-481.
- JOHANNOT-GRADIS Christiane, *Le patrimoine culturel matériel et immatériel : quelle protection en cas de conflit armé?*, Zürich, Schulthess, 2013, 876 pp.
- KONOPKA Jean A. (ed.), *La protection des biens culturels en temps de guerre et de paix d'après les conventions internationales (multilatérales)*, Genève, Imprimerie de Versoix, 1997, 163 pp.
- MCDONALD David (Ed.), *Culture Under Fire: Armed Non-State Actors and Cultural Heritage During Wartime*, Geneva, Geneva Call, 2018, 62 pp.
- O'KEEFE Roger, *The Protection of Cultural Property in Armed Conflict*, Cambridge, CUP, 2006, 404 pp.
- PETROVIC Jadranka, *The Old Bridge of Mostar and Increasing Respect for Cultural Property in Armed Conflict*, Leiden, Boston, Nijhoff, 2013, 354 pp.
- STAVRAKI Emmanuelle, *La Convention pour la protection des biens culturels en cas de conflit armé*, Athens, Editions Ant. N. Sakkoulas, 1996, 306 pp.
- TECHERA Erika J., "Protection of Cultural Heritage in Times of Armed Conflict: the International Legal Framework Revisited", in *Macquarie Journal of International and Comparative Environmental Law*, Vol. 4, No. 1, 2007, pp. 1-20.
- TOMAN Jiri, *The Protection of Cultural Property in the Event of Armed Conflict*, Aldershot/Paris, Dartmouth Publishing Company/ UNESCO Publishing, 1996, 525 pp.

### Further reading:

- ABTAHI Hirad, "Le patrimoine culturel iraqui à l'épreuve de l'intervention militaire du printemps 2003", in *Actualité et Droit International*, May 2003, 13 pp.

- ABTAHI Hirad, "The Protection of Cultural Property in Times of Armed Conflict: The Practice of the International Criminal Tribunal for the former Yugoslavia", in *Harvard Human Rights Journal*, Vol. 14, 2001, pp. 1-32.
- CARDUCCI Guido, "L'obligation de restitution des biens culturels et des objets d'art en cas de conflit armé : droit coutumier et droit conventionnel avant et après la Convention de La Haye de 1954. L'importance du facteur temporel dans les rapports entre les traités et la coutume", in *RGDIP*, Vol. 104/2, 2000, pp. 289-357.
- DUTLI Maria Teresa, "Protection juridique des biens culturels dans les conflits armés : le Comité international de la Croix-Rouge (CICR) et la Protection des biens culturels (PBC)", in *Forum protection des biens culturels*, No. 11, 2007, pp. 71-77.
- FORREST Craig J. S., "The Doctrine of Military Necessity and the Protection of Cultural Property during Armed Conflicts", in *California Western International Law Journal*, No. 37, 2007, pp. 177-219.
- HLADIK Jan, "The Review Process of the 1954 Hague Convention for the Protection of Cultural Property", in *YIHL*, Vol. 1, 1998, pp. 313-322.
- GERSTENBLITH Patty, "Protecting Cultural Heritage in Armed Conflict: Looking Back, Looking Forward", in *Cardozo Public Law, Policy and Ethics Journal*, Vol. 7, No. 3, 2009, pp. 677-708.
- PRATT Lara, "Prosecution for the Destruction of Cultural Property – Significance of the Al Mahdi Trial", in *International Criminal Law Review*, Vol. 18, No. 6, 2018, pp. 1048-1079.
- TANJA Gerard J., "Recent Developments Concerning the Law for the Protection of Cultural Property in the Event of Armed Conflict", in *Leiden Journal of International Law*, 1994, pp. 115-125.
- TOMAN Jiri, "La protection des biens culturels dans les conflits armés internationaux : cadre juridique et institutionnel", in *Studies and Essays on International Humanitarian Law and Red Cross Principles in Honour of Jean Pictet*, Geneva/The Hague, ICRC/M. Nijhoff, 1984, pp. 59-580.
- VAN WOUDENBERG Nout & LIJNZAAD Liesbeth (eds), *Protecting Cultural Property in Armed Conflict: an Insight into the 1999 Second Protocol to the Hague Convention of 1954 for the Protection of Cultural Property in the Event of Armed Conflict*, Leiden, Boston, M. Nijhoff, 2010, 243 pp.

bb) objects indispensable to the survival of the civilian population

P I, Art. 54 [CIHL, Rules 53 and 54]

## • CASES AND DOCUMENTS

- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 (Para. 205)
- Libya, Report of the Office of the UN High Commissioner for Human Rights (2014/15)

- water

## • CASES AND DOCUMENTS

- Water and Armed Conflicts
- Israel, Operation Cast Lead [Part II, paras 913-989]
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 (Paras 155, 160)

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BOUTRUCHE Théo, "Le statut de l'eau en droit international humanitaire", in *IRRC*, No. 840, December 2000, pp. 887-916.
- ICRC, *Water and War: ICRC Response*, Geneva, ICRC, July 2009, 21 pp.
- JORGENSEN Nikolai, "The Protection of Freshwater in Armed Conflict", in *Journal of International Law and International Relations*, Vol. 3, No. 2, 2007, pp. 57-96.
- ZEMMALI Ameur, "The Protection of Water in Times of Armed Conflicts", in *IRRC*, No. 308, September-October 1995, pp. 550-564.
- ZEMMALI Ameur, "The Right to Water in Times of Armed Conflict", in LIJNZAAD Liesbeth, VAN SAMBEEK Johanna & TAHZIB-LIE Bahia (eds), *Making the Voice of Humanity Heard*, Leiden/Boston, M. Nijhoff, 2004, pp. 307-318.

### Further reading:

- ABOUALI Gamal, "Natural Resources under Occupation: The Status of Palestinian Water under International Law", in *Pace International Law Review*, Vol. 10/2, 1998, pp. 411-574.
- ICRC, *Water and War: Symposium on Water in Armed Conflicts (Montreux, 21-23 November 1994)*, Geneva, ICRC, 1995, 168 pp.

cc) works and installations containing dangerous forces

P I, Art. 56 [CIHL, Rule 42]

## - CASES AND DOCUMENTS

- Croatia, Prosecutor v. Rajko Radulovic and Others
- Colombia, Constitutionality of IHL Implementing Legislation [Paras 2, and E.3]
- Iran - Victim of Cyberwarfare

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- RAMBERG Bennett, *Destruction of Nuclear Energy Facilities in War*, Lexington, D.C. Health & Co, 1980, 203 pp.
- RICHARDSON C. John, "Stuxnet as Cyberwarfare: Applying the Law of War to the Virtual Battlefield", in *SSRN*, No. 29, 2011, 38 pp.

dd) medical equipment

## • CASES AND DOCUMENTS

- Israel/Lebanon/Hezbollah, Conflict in 2006 (Part I, paras 172-177)
- Afghanistan, Attack on Kunduz Trauma Centre

## • SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- RUBESTEIN, Leonard S, "Responsibility for protection of medical workers and facilities in armed conflict", in *JAAC* Vol. 375, No. 9711, 2010, pp. 329-340.

### a. the natural environment

P I, Arts 35(3) and 55 [CIHL, Rules 44 and 45]

## • CASES AND DOCUMENTS

- The Environment and International Humanitarian Law
- Iraq, IHL and Environmental Protection
- ICJ, Nuclear Weapons Advisory Opinion [Paras 30 and 33]
- Israel/Lebanon/Hezbollah, Conflict in 2006 [Part I, paras 209-220]
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [para. 296]
- Colombia, Special Jurisdiction for Peace, Crimes against the Environment in Cauca

## • SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- ANTOINE Philippe, "International Humanitarian Law and the Protection of the Environment in Time of Armed Conflict", in *IRRC*, No. 291, November-December 1992, pp. 517-537.

- AUSTIN Jay E. & BRUCH Karl E. (eds), *The environmental consequences of war*, Cambridge, CUP, 2000, 712 pp.
- BODANSKY Daniel, *Legal Regulation of the Effect of Military Activity on the Environment*, Berlin, Erich Schmidt Verlag, 2003, 126 pp.
- BOTHE Michael, "The Protection of the Environment in Times of Armed Conflict", in *German Yearbook of International Law*, Vol. 34, 1991, p. 54.
- BOUVIER Antoine, "Protection of the Natural Environment in Time of Armed Conflict", in *IRRC*, No. 285, November-December 1991, pp. 567-578.
- DORSOUWA Hamndou & BOUCHARD Michel-André, "Conflits armés et environnement : cadre, modalités, méthodes et rôle de l'évaluation environnementale", in *Développement durable et territoire*, Dossier 8, 2007, 17 pp.
- HULME Karen, *Law of the Environment and Armed Conflict*, Cheltenham, Northampton, E.Elgar, 2017, 870 pp.
- ICRC, *Guidelines on Protection of Natural Environment in Armed Conflict, Rules and Recommendation Relating to the Protection of the Natural Environment under International Humanitarian Law, with Commentary*, ICRC, Geneva, 2020, 129 pp.
- MOLLARD BANNELIER Karine, *La protection de l'environnement en temps de conflit armé*, Paris, Pedone, 2001, 542 pp.
- REYHANI Roman, "Protection of the Environment During Armed Conflict", in *Missouri Environmental Law and Policy Review*, Vol. 14, No. 2, 2007, pp. 323-338.
- SCHMITT Michael N., "Humanitarian Law and the Environment", in *The Denver Journal of International Law and Policy*, Vol. 28/3, 2000, 265-323.
- SMITH Tara, "Critical perspectives on environmental protection in non-international armed conflict: developing the principles of distinction, proportionality and necessity", in *Leiden Journal of International Law*, Vol. 32, No. 4, 2019, pp. 759-779.
- SPIEKER Heike, "The Conduct of Hostilities and the Protection of the Environment", in *Frieden in Freiheit = Peace in Liberty = Paix en liberté: Festschrift für Michael Bothe zum 70 Geburtstag*, Baden-Baden, Nomos, 2008, pp. 741-768.
- United Nations Environmental Programme, *Protecting the Environment During Armed Conflict: an Inventory and Analysis of International Law*, Nairobi, United Nations Environment Programme, November 2009, 83 pp.
- WYATT Julian, "Law-making at the intersection of international environmental, humanitarian and criminal law: the issue of damage to the environment in international armed conflict", in *IRRC*, Vol. 92, 2010, pp. 593-646.

#### Further reading:

- ALEXANDER Nicholas G., "Airstrikes and Environmental Damage: Can the United States be Held Liable for Operation Allied Force?", in *Colorado Journal of International Environmental Law and Policy*, Vol. 11/2, 2000, pp. 471-498.
- BARNES Ashley & WATERS Christopher, "The Arctic Environment and International Humanitarian

Law", in *Canadian Yearbook of International Law*, Vol. 49, 2011, pp. 213-241.

- BOISSON DE CHAZOURNES Laurence, DESGAGNÉ Richard & ROMANO Cesare, *Protection internationale de l'environnement. Recueil d'instruments juridiques*, Paris, Pedone, 1998, 1117 pp.
- BOSTIAN Ida L., "The Environmental Consequences of the Kosovo Conflict and the NATO Bombing of Serbia", in *Colorado Journal of International Environmental Law and Policy*, 1999, pp. 230-240.
- BOUVIER Antoine, "Recent Studies on the Protection of the Environment in Time of Armed Conflict", in *IRRC*, No. 291, November-December 1992, pp. 554-566.
- DESGAGNÉ Richard, "The Prevention of Environmental Damage in Time of Armed Conflict: Proportionality and Precautionary Measures", in *YIHL*, Vol. 3, 2000, pp. 109-129.
- DRUMBL Mark A., "Waging War against the World: The Need to Move from War Crimes to Environmental Crimes", in *Fordham International Law Journal*, Vol. 22/1, 1998, pp. 122-153.
- GRUNAWALT Richard J., KING John E. & McCLAIN Ronald S. (eds), "Protection of the Environment During Armed Conflict", in *Naval War College*, Vol. 19, 1996, 720 pp.
- ICRC, "Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict", in *IRRC*, No. 311, March-April 1996, pp. 230-237.
- KISS Alexandre, "Les Protocoles additionnels aux Conventions de Genève de 1977 et la protection de biens de l'environnement", in *Studies and Essays on International Humanitarian Law and Red Cross Principles in Honour of Jean Pictet*, Geneva/The Hague, ICRC/M. Nijhoff, 1984, pp. 229-262.
- KOPPE Erik, *The Use of Nuclear Weapons and the Protection of the Environment During International Armed Conflict*, Portland (USA), Hart Publishing, 2008, 447 pp.
- LAWRENCE Jessica C. & HELLER Kevin Jon, "The First Ecocentric Environmental War Crime: the Limits of Article 8(2)(b)(iv) of the Rome Statute", in *Georgetown International Environmental Law Review*, Vol. 20, No. 1, 2007, pp. 61-95.
- MARAUHN Thilo, "Environmental Damage in Times of Armed Conflict – Not 'Really' a Matter of Criminal Responsibility?", in *IRRC*, No. 840, December 2000, pp. 1029-2036.
- MOMTAZ Djamchid, "Les règles relatives à la protection de l'environnement au cours des conflits armés à l'épreuve du conflit entre l'Irak et le Koweit", in *AFDI*, 1991, pp. 203-220.
- OKOWA Phoebe N., "Natural Resources in Situations of Armed Conflict: Is There a Coherent Framework for Protection?", in *International Community Law Review*, Vol. 9, No. 3, 2007, pp. 237-262.
- PETERSON Ines, "The Natural Environment in Times of Armed Conflict: a Concern for International War Crimes Law?", in *Leiden Journal of International Law*, Vol. 22, Issue 2, 2009, pp. 325-343.
- PLANT Glen, "Environmental Damage and the Laws of War: Points Addressed to Military Lawyers", in FOX Hazel & MEYER Michael A. (eds), *Armed Conflict and the New Law, Volume II – Effecting Compliance*, 1993, pp. 159-174.
- POWER Mark, "La protection de l'environnement en droit international humanitaire : le cas du Kosovo", in *Ottawa Law Review*, Vol. 33, 2001-2002, pp. 225-254.
- REICHBERG Gregory & SYSE Henrik, "Protecting the Natural Environment in Wartime: Ethical Considerations from the Just War Tradition", in *Journal of Peace Research*, Vol. 37/4, 2000, pp. 449-468.
- RICHARDS Peter J., "Mars Meets Mother Nature: Protecting the Environment during Armed

Conflict", in *Stetson Law Review*, Vol. 28/4, 1999, pp. 1047-1090.

- ROBERTS Adam, "Environmental Destruction in the Gulf War", in *IRRC*, No. 291, November-December 1992, pp. 538-553.
- ROBERTS Adam, "Failures in Protecting the Environment in the 1990-91 Gulf War", in ROWE Peter (ed.), *The Gulf War 1990-91 in International and English Law*, London, Sweet & Maxwell, 1993, pp. 111-154.
- SCHMITT Michael N., "The Environmental Law of War: An Invitation to Critical Re-examination", in *Journal of Legal Studies*, Vol. 6, 1995-96, pp. 237-271.
- SHARP Peter, "Prospects for Environmental Liability in the International Criminal Court", in *Virginia Environmental Law Journal*, Vol. 18/2, 1999, pp. 217-243.
- SCHWABACH Aaron, "Environmental Damage Resulting from the NATO Military Action against Yugoslavia", in *Columbia Journal of Environmental Law*, Vol. 25/1, 2000, pp. 117-140.
- VAN DER VYVER Johan D., "The Environment: State Sovereignty, Human Rights, and Armed Conflict", in *Emory International Law Review*, Vol. 23, No. 1, 2009, pp. 85-112.
- YORK Christopher, "International Law and the Collateral Effects of War on the Environment: The Persian Gulf", in *South Africa Journal of Human Rights*, Vol. 7, 1991, pp. 269-290.
- YUZON E.F.J., "Deliberate Environmental Modification Through the Use of Chemical and Biological Weapons: Greening the International Laws of Armed Conflict to Establish an Environmentally Protective Regime", in *American University Journal of International Law and Policy*, Vol. 11, 1996, pp. 793-846.

## 10. Precautionary measures in attack

### Introductory text

Under IHL only military objectives may be attacked. [38] Even such attacks, however, are not without restrictions. An attack must be cancelled if it becomes apparent that it is of a type that is prohibited. [39] If circumstances permit, an advance warning must be given for those attacks which may affect the civilian population. [40] In determining the objective of an attack, and when a choice is possible, the one causing least danger to the civilian population must be selected. [41] Furthermore, IHL requires those planning and deciding on an attack to take precautionary measures, [42] including refraining from attacking when incidental loss of civilian life or destruction of civilian objects outweighs the military advantage of the attack. [43] The meaning of these obligations in practice remains controversial in many cases, mainly with regard to which precautions are "feasible". Military and humanitarian considerations may influence the feasibility of such precautions: the importance and the urgency of destroying a target; the range, accuracy and effects radius of available weapons; the conditions affecting the accuracy of targeting; the proximity of civilians and civilian objects; the possible release of hazardous substances; the protection of the party's own forces (and the proportionality between the additional protection for those forces and the additional risks for civilians and civilian objects when a certain means or method is chosen); the availability and feasibility of alternatives; the

necessity to keep certain weapons available for future attacks on targets which are militarily more important or more risky for the civilian population.

## ▲ CASES AND DOCUMENTS

- United States, Use of Autonomous Weapons
- ICRC, The Challenges of Contemporary Armed Conflicts
- Israel, Operation Cast Lead [Part I, paras 132-133, Part II, para. 529]
- Israel, Human Rights Committee's Report on Beit Hanoun [Paras 26 and 38-42]
- Israel, Report of the Winograd Commission [Para. 26]
- Case Study, Armed Conflicts in the former Yugoslavia [27]
- Human Rights Committee, *Guerrero v. Colombia*
- Afghanistan, Goatherd Saved from Attack
- ECHR, *Isayeva v. Russia*
- ECHR, *Khatsiyeva v. Russia* [Paras 21 and 139]
- Georgia/Russia, Human Rights Watch's Report on the Conflict in South Ossetia [Paras 18-25]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 66-67, 74-82]
- The armed conflict in Syria
- Israel, Blockade of Gaza and the Flotilla Incident
- Libya, NATO Intervention 2011
- Libya, Report of the Office of the UN High Commissioner for Human Rights (2014/15)
- UN, Report of the Secretary-General for the World Humanitarian Summit
- United States, The US Plan to Mitigate Civilian Harm in Armed Conflicts

## ▲ SPECIFIC BIBLIOGRAPHY

### **Suggested reading:**

HENDERSON Ian, *The Contemporary Law of Targeting: [Military Objectives, Proportionality and Precautions in Attack under Additional Protocol I]*, Leiden, Boston, M. Nijhoff, 2009, 266 pp.

NEUMAN Noam, "A Precautionary Tale: The Theory and Practice of Precautions in Attack", in *Israel Yearbook on Human Rights*, Vol. 48, 2018, pp. 19-41.

NEUMAN Noam & BARUCH Pnina Sharvit, "Warning Civilians Prior to Attack under International Law: Theory and Practice", in *International Law Studies*, Vol. 87, 2011, pp. 359-412.

QUÉGUINER Jean-François, "Precautions under the law governing the conduct of hostilities", in *IRRC*, Vol. 88, No. 864, December 2006, pp. 793-821.

SASSÒLI Marco & QUINTIN Anne, "Active and Passive Precautions in Air and Missile Warfare", in *Israel Yearbook on Human Rights*, Vol. 44, 2014, pp. 69-123.

### **Further readings:**

BOOTHBY Bill, "Autonomous Attack – Opportunity or Spectre?", in *Yearbook of International Humanitarian*

Law, 2013, pp. 71-89.

QUÉGUINER Jean-François, "Precautions under the law governing the conduct of hostilities", in *IRRC*, Vol. 88, No. 864, December 2006, pp. 793-821.

a. **an attack must be cancelled if it becomes apparent that it is a prohibited one**

P I, Art. 57(2)(b) [CIHL, Rule 19]

#### ▲ CASES AND DOCUMENTS

- France, Accession to Protocol I (Part B., para. 16)
- Israel, Human Rights Committee's Report on Beit Hanoun (Para. 26)
- Federal Republic of Yugoslavia, NATO Intervention (Part A., para. 6)
- Afghanistan, Attack on Kunduz Trauma Centre
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 (Paras 155, 160, 178-180)

a. **advance warning must be given, unless circumstances do not permit**

P I, Art. 57(2)(c) [CIHL, Rule 20]

#### ▲ CASES AND DOCUMENTS

- France, Accession to Protocol I [Part B., para. 16]
- Israel, Operation Cast Lead [Part I, paras 262-265, Part II, paras 499-536]
- Israel/Lebanon/Hezbollah, Conflict in 2006 (Part I, paras 149-158)
- Federal Republic of Yugoslavia, NATO Intervention (Part A., paras 18, 20, 22-25 and B., para. 77)
- Civil War in Nepal [Part II.]
- ECHR, Isayeva v. Russia (Paras 15, 25, 72, 164, 171, 187, 192-193)
- ECHR, Khatsiyeva v. Russia (Paras 21 and 139)
- Israel/Palestine, Operation Protective Edge (Gaza, 13 June - 26 August 2014)
- The Netherlands, Fighting in the Chora District (Afghanistan)

#### ▲ SPECIFIC BIBLIOGRAPHY

##### Suggested reading:

- VAN DEN BOOGAARD Jeroen C., "Knock on the Roof: Legitimate Warning of Method of warfare?", in *Yearbook of International Humanitarian Law*, Vol. 19, 2016, pp. 183-209.

a. **when a choice is possible, the objective causing the least danger to the civilian population must be selected**

P I, Art. 57(3) [CIHL, Rule 21]

b. **additional obligations of those who plan or decide on an attack**

P I, Art. 57(2)(a) [CIHL, Rules 16 and 17]

▲ **CASES AND DOCUMENTS**

- Israel, The Rafah Case (Paras 54-58)
- United States/United Kingdom, Report on the Conduct of the Persian Gulf War
- United States/United Kingdom, Conduct of the 2003 War in Iraq
- Iraq, Use of Force by United States Forces in Occupied Iraq
- Federal Republic of Yugoslavia, NATO Intervention
- Afghanistan, Operation "Enduring Freedom" [Part B.]
- The Netherlands, Fighting in the Chora District (Afghanistan)

aa) verify that objectives are not illicit

▲ **CASES AND DOCUMENTS**

- United States/United Kingdom, Conduct of the 2003 War in Iraq
- ECHR, Khatsiyeva v. Russia [Paras 135-138]
- Afghanistan, Attack on Kunduz Trauma Centre
- The Netherlands, Fighting in the Chora District (Afghanistan)

bb) choose means and methods avoiding or minimizing civilian losses

▲ **CASES AND DOCUMENTS**

- United States/United Kingdom, Report on the Conduct of the Persian Gulf War
- United States/United Kingdom, Conduct of the 2003 War in Iraq
- Afghanistan, Goatherd Saved from Attack
- Afghanistan, Assessment of ISAF Strategy
- Afghanistan, Code of Conduct of the Mujahideen [Arts 41(C.) and 46]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 74-82]
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 (Paras 257-258)

cc) refrain from attacks causing disproportionate civilian losses

## ▲ CASES AND DOCUMENTS

- United States/United Kingdom, Conduct of the 2003 War in Iraq
- Afghanistan, Drug Dealers as Military Targets
- Afghanistan, Goatherd Saved from Attack
- Afghanistan, Assessment of ISAF Strategy
- Civil War in Nepal [Part II.]

## 11. Precautionary measures against the effects of attacks

GC IV, Arts 18(5); P I, Art. 58 [CIHL, Rules 22-24]

### Introductory text

Contrary to Art. 57 of Protocol I, [44] which lays down rules for the conduct to be observed in attacks on the territory under the control of the enemy, Art. 58 of Protocol I relates to specific measures which every Power must take in its own territory in favour of its nationals, or in territory under its control. These precautionary measures against the effects of attacks (which are often referred to as "Conduct of Defence" [45]) include three specific obligations that Parties to a conflict shall discharge "to the maximum extent feasible": [46]

1. They must "endeavour to remove the civilian population, individual civilians and civilian objects under their control from the vicinity of military objectives". [47] In most cases, only specific categories of the population (i.e. children, the sick or women) are evacuated; sometimes the entire population is evacuated. It should be underlined that, when carrying out such measures, occupying powers remain bound by the strict limitations spelled out in Art. 49 of Convention IV.
2. They must "avoid locating military objectives within or near densely populated areas". [48] This obligation, which covers "both permanent and mobile objectives [...] should already be taken into consideration in peacetime". [49]
3. They must "take the other necessary precautions to protect the civilian population, individual civilians and civilian objects under their control against the dangers resulting from military operations". [50] Practically speaking, the "other measures" are chiefly building shelters to provide adequate protection against the effect of hostilities for the civilian population and the training of efficient civil defence services.

The wording, however, clearly indicates that these obligations are weaker than those of an attacker. They have to be taken only "to the maximum extent possible," and the defender only has to "endeavour to remove" the civilian population and "avoid" locating military objectives nearby. While responsibility for the protection of the civilian population against the effects of hostilities is shouldered by both the attacker and the defender, its weight is not equally distributed.

## ▲ CASES AND DOCUMENTS

- UN, Secretary-General's Reports on the Protection of Civilians in Armed Conflict
- Israel, Operation Cast Lead [Part I, paras 151-169, Part II, paras 439-498]
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law [Parts C. and D.]
- United States/United Kingdom, Report on the Conduct of the Persian Gulf War
- Civil War in Nepal [Part II.]
- ECHR, Isayeva v. Russia [Paras 15, 23, 25-26, 69-70]
- Georgia/Russia, Human Rights Watch's Report on the Conflict in South Ossetia [Paras 18-25]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 79-82]
- The armed conflict in Syria
- Israel/Palestine, Operation Protective Edge (Gaza, 13 June - 26 August 2014)
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [para. 218]
- Mexico, Recapture of Ovidio Guzmán, One of the Leaders of the Sinaloa Cartel

## ▲ SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- JENSEN Eric Talbot, "Precautions Against the Effect of Attacks in Urban Areas", in *IRRC*, Vol. 98, No. 901, 2017, pp. 147-175.

### Further reading:

- RICHEMOND-BARAK Daphné & FEINBERG Ayal, "The irony of the iron dome: intelligent defense systems, law, and security", in *Harvard National Security Journal*, Vol. 9, No. 2, 2016, pp. 469-525.

## 12. Presumptions

P I, Arts 50(1) and 52(3)

## ▲ CASES AND DOCUMENTS

- France, Accession to Protocol I (Part B., para. 9)
- Belgium, Public Prosecutor v. G.W.
- United States/United Kingdom, Report on the Conduct of the Persian Gulf War
- Human Rights Committee, *Guerrero v. Colombia*

- Afghanistan, Drug Dealers as Legitimate Targets
- ECHR, Khatsiyeva v. Russia [Paras 21, 132-139]
- European Court of Human Rights, Kononov v. Latvia

## 13. Zones created to protect war victims against the effects of hostilities

GC I, Art. 23; GC IV, Arts 14 and 15; P I, Arts 59 and 60 [CIHL, Rules 35-37]

### Introductory text

While IHL mainly tries to protect civilians and other categories of protected persons by obliging combatants to identify positively military objectives and to only attack them, respecting civilians wherever they happen to be, it also foresees different types of zones aimed at separating civilians from military objectives. The following table summarizes the different types of protected zones. They have in common the purpose of protecting war victims from the effects of hostilities (but not from falling under the control of the enemy) by assuring enemy forces that no military objectives exist in a defined area where war victims are concentrated. Thus, if the enemy respects IHL, the war victims run no risk of being harmed by the effects of hostilities. The risk with such zones is that they presuppose the willingness of the enemy to respect IHL. Hence, they are pointless against an enemy determined to violate IHL. On the contrary, such zones may then lead to the displacement of civilians and help the enemy target and abuse civilians by concentrating them in a confined location.

Established under *jus in bello*, such zones have to be distinguished from the safe areas, humanitarian corridors or safe havens recently created under Chapter VII of the UN Charter, i.e. under *jus ad bellum*, and meant to prevent certain areas and the war victims in them from falling into enemy hands.

**Protected Zones According to  
International Humanitarian Law**

Armed Conflict	International				Non International
Legal Basis	GC I, Article 23 GC I, Annex I	GC IV, Article 14 GC IV, Annex I	GC IV, Article 15	P I, Article 59	P I, Article 60
Terminology	Hospital zones and localities	Hospital and safety zones and localities	Neutralized zones	Non-defended localities	Demilitarized zones
Categories of Protected Persons	Sick, wounded, and related personnel	Specific categories of civilians: wounded, sick, aged persons, children under 15, expectant mothers and mothers of children under 7	All civilians who do not take part in the hostilities and wounded and sick combatants	Civilian population (in its place of residence)	Civilian population (in its place of residence)
Modality of Creation	Written agreement between the Parties or unilateral declaration with recognition of the opposing party	Written agreement between the Parties or unilateral declaration with recognition of the opposing party	Written agreement between the Parties	Notification to the opposing Party (or <i>ad hoc</i> agreement if not all conditions satisfied)	Express agreement
Characteristics: - location - time-frame	Distant from the front Durable	Distant from the front Durable	Inside the combat zone Provisional	Near or inside the combat zone; Open to occupation; Military personnel and equipment evacuated	Prohibition to extend military operations to such zones By analogy with the principles of GC IV, Article 15
Markings	Red cross/crescent	Oblique red bands on white ground	To be defined	To be agreed upon by the Parties	To be agreed upon by the Parties Red cross emblem (if under authority of the ICRC)

## • CASES AND DOCUMENTS

- Sri Lanka, Jaffna Hospital Zone
- Sri Lanka, Conflict in the Vanni [Paras 12-16]
- Case Study, Armed Conflicts in the former Yugoslavia [14]
- Bosnia and Herzegovina, Constitution of Safe Areas in 1992-1993
- Netherlands, Responsibility of International Organizations [Paras 2.4 and 2.6]
- ECHR, Isayeva v. Russia [Paras 16 and 186]

## • SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BOUVIER Antoine, "Zones protégées, zones de sécurité et protection de la population civile", in BOUSTANY Katia & DORMOY Daniel, *Perspectives humanitaires entre conflits, droit(s) et action*, Brussels, Bruylant, 2002, pp. 251-269.
- LAVOYER Jean-Philippe, "International Humanitarian Law, Protected Zones and the Use of Force", in BIERMANN Wolfgang & VADSET Martin (eds), *UNPeacekeeping in Trouble: Lessons Learned from the Former Yugoslavia*, Ashgate, Aldershot, 1998, pp. 262-279.
- OSWALD Bruce M., "The Creation and Control of Places of Protection During United Nations Peace Operations", in *IRRC*, No. 844, December 2001, pp. 1013-1036.
- SANDOZ Yves, "Localités et zones sous protection spéciale", in *Quatre études du droit international humanitaire*, Geneva, Henry-Dunant Institute, 1985, pp. 35-47.
- TORELLI Maurice, "Les zones de sécurité", in *RGDIP*, Vol. 99/4, 1995, pp. 787-848.
- PATEL Bimal N., "Protection zones in international humanitarian law", in *The Indian Journal of International Law*, Vol. 39/4, 1999, pp. 689-702.

### Further reading:

- ICRC, "Zones sanitaires et zones de sécurité", in *IRRC*, Nos 390 & 392, 1951, 80 pp.
- LANDGREN Karen, "Safety Zones and International Protection: A Dark Grey Area", in *International Journal of Refugee Law*, Vol. 7/3, 1995, pp. 436-458.

### a. open cities

## • SPECIFIC BIBLIOGRAPHY

### Suggested reading:

ELKIN G., "Application of the 'Open City' Concept to Rome 19421944", in *Air Force Law Review*, 1980-1981, pp. 188-200.

## 14. Civil defence

P I, Arts 61-67

### - SPECIFIC BIBLIOGRAPHY

#### Suggested reading:

JAKOVLJEVIC Bosko, New International Status of Civil Defence, Geneva/The Hague, Henry-Dunant Institute/M. Nijhoff, 1982, 142 pp.

JEANNET Stéphane, "Civil Defence 1977-1997: From Law to Practice", in *IRRC*, No. 325, December 1998, pp. 715-723.

SCHULTZ E., Civil Defence in International Law, Copenhagen, Danish National Civil Defence and Emergency Planning Directorate, 1977, 59 pp.

#### Footnotes

- [1] See HR, Art. 25
- [2] Those specially protected objects, e.g., dams, dikes, and hospitals, may not be used by those who control them for military action and should therefore never become military objectives. If they are however used for military purposes, even they can under restricted circumstances become military objectives. (See, e.g., P I, Art. 56(2); GC IV, Art. 19)
- [3] See P I, Art. 52(3)
- [4] Indeed, only a material object can be a military objective under IHL, as immaterial objectives can only be achieved, not attacked. It is the basic idea of IHL that political objectives may be achieved by a belligerent with military force only by directing the latter against material military objectives. As for computer network attacks, they can only be considered as "attacks" if they have material consequences.
- [5] In practice, however, one cannot imagine that the destruction, capture, or neutralization of an object contributing to the military action of one side would not be militarily advantageous for the enemy; it is just as difficult to imagine how the destruction, capture, or neutralization of an object could be a military advantage for one side if that same object did not somehow contribute to the military action of the enemy.
- [6] One cannot imagine how it could do this other than by its "nature, location, purpose or use." Those elements foreseen in Art. 52(2) only clarify that not only objects of a military nature are military objectives.
- [7] Characterizing the contribution as "effective" and the advantage as "definite" – as Art. 52(2) does – avoids that everything can be considered as a military objective, taking into account indirect contributions and possible advantages; thus, the limitation to "military" objectives could be too easily undermined.
- [8] If force could be used to achieve the political aim by directing it at any advantage, not just military

objectives, even the civilian population as such would be attacked, as they might well influence the enemy government. Then, however, there would be no more IHL, merely considerations of effectiveness.

- [9] This variety justifies the presumption of civilian status provided for in P I, Art. 50(1).
- [10] The definition of civilians benefiting from protected civilian status under the Convention IV is more restrictive in that it excludes those in the power of their own side, but it is also complementary to that of the combatant. (See GC IV, Art. 4)
- [11] See P I, Art. 51(3) and *infra*, Conduct of Hostilities, II. The protection of the civilian population against the effects of hostilities, 7) Loss of protection: The concept of direct participation in hostilities and its consequences
- [12] See P I, Art. 50(2)
- [13] See P I, Art. 50(3)
- [14] See P I, Arts 48, 51(2) and 85(3); P II, Art. 13
- [15] See P I, Arts 52-56 and 85(3)
- [16] See P I, Art. 52(2)
- [17] See HR, Art. 22; P I, Art. 51(4) and (5)
- [18] See P I, Art. 51(5)(b)
- [19] See HR, Arts 26 and 27; GC IV, Art. 19 (concerning hospitals); P I, Art. 57(2)
- [20] See P I, Arts 51(6), 52(1), 53(c), 54(4), 55(2) and 56(4)
- [21] See *supra*
- [22] See P I, Art. 51(3); P II, Art. 13(3)
- [23] See ICRC, Interpretive Guidance on the Notion of Direct Participation in Hostilities
- [24] Y. Sandoz et al. (eds), Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949, ICRC, Geneva, 1987, para. 4789
- [25] See P I, Art. 51(2), 52-56, Art. 85(3); P II, Art. 13
- [26] See GC IV, Art. 28; P I, Art. 51(7)
- [27] See P I, Art. 58 and *infra* Conduct of Hostilities, II. The protection of the civilian population against the effects of hostilities, 11) Precautionary measures against the effects of attacks
- [28] See P I, Art. 52
- [29] See P I, Arts 51(8) and 57
- [30] See P I, Art. 51(5)(b)
- [31] See HR, Arts 25 and 27; P I, Arts 48, 52, and 85(3)
- [32] See The Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict of May 14 1954 [See
- [33] See P I, Art. 54; P II, Art. 14
- [34] See P I, Art. 56; P II, Art. 15
- [35] See P I, Art. 56(2)
- [36] See P I, Art. 55; see also Convention of 10 December 1976 on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD)
- [37] See GC I, Arts 19(1) and 36(1); GC II, Arts 22, 24-27, and 39(1); GC IV, Arts 18-19 and 21-22, P I, Arts 20 and 21-31; P II, Art. 11

- [38] See P I, Art. 52(2)
- [39] See P I, Art. 57(2)(b)
- [40] See HR, Art. 26; GC IV, Art. 19 (concerning hospitals); P I, Art. 57(2)(c)
- [41] See P I, Art. 57(3)
- [42] See P I, Art. 57(2)(a)
- [43] See P I, Art. 57(2)(a)(iii)
- [44] See *supra*, *Conduct of Hostilities*, II. The protection of the civilian population against the effects of hostilities, 10) Precautionary measures in attack
- [45] See Mulinén, F de, *Handbook on the Law of War for Armed Forces*, ICRC, 1987, p. 104
- [46] See P I, Art. 58(1)
- [47] See P I, Art. 58(a)
- [48] See P I, Art. 58(b)
- [49] See Sandoz, Y, Swinarski, C. & Zimmermann, B. (eds), *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, Geneva, ICRC, M. Nijhoff, 1987, Art. 58, para. 2251
- [50] See P I, Art. 58(c)

### III. Means and methods of warfare

(See also *supra* *Conduct of Hostilities*, II. The protection of the civilian population against the effects of hostilities, 6) Prohibited attacks and 10) Precautionary measures in attack)

HR, Arts 22-34

#### Introductory text

[We are deeply grateful to Dr. Théo Boutruche, IHL consultant, who wrote his PhD thesis (*L'interdiction des maux superflus : contribution à l'étude des principes et règles relatifs aux moyens et méthodes de guerre en droit international humanitaire*, Graduate Institute of International and Development Studies, Geneva, 2008) on the concept of superfluous injury or unnecessary suffering, for this contribution.]

Under IHL the term “rules on means and methods of warfare” refers to a complex and large set of norms that are relatively fragmented and not systematically identified as such. While the term “means of warfare” commonly relates to the regulation of weapons, the term “methods” covers a broader array of rules depending on the definition considered. Traditionally, with regard to weapons, “means” encompasses weapons, weapons systems or platforms employed for the purposes of attack, whereas “methods” designates the way or manner in which the weapons are used. However, the concept of method of warfare also comprises any specific, tactical or strategic, ways of conducting hostilities that are not particularly related to weapons and that are intended to overwhelm and weaken the adversary, such as bombing, as well as the specific tactics used for attack, such as high altitude bombing. The term “methods” is rather new in treaty law.

State practice offers examples of these two understandings of “methods”. The IHL governing means and methods of warfare contains two types of norms: general principles banning certain effects, and specific rules addressing particular weapons or methods. The distinction between “means” and “methods” is also related to the way IHL regulates the use of weapons. This branch of law either prohibits the use of certain weapons in any circumstances due to their inherent characteristics or it merely restricts and limits certain ways of using all weapons or certain specific weapons. For example, the prohibition of indiscriminate effects may be relevant in relation to the very nature of the effects of a weapon and at the same time for any type of weapon that can potentially be used indiscriminately.

Historically, prohibitions and limitations on means and methods of warfare were prompted by the concern to protect combatants, which saw the emergence of the principle prohibiting weapons causing superfluous injury or unnecessary suffering [52] and the ban on specific weapons, such as explosive projectiles weighing less than 400 grams [53] or dum-dum bullets [54], as well as particular methods like killing or wounding treacherously. [55] Protocol I laid down elaborate principles and rules governing means and methods of warfare aimed at protecting the civilian population and objects, such as the prohibition of indiscriminate attacks, including those which employ a method or means of combat which cannot be directed at a specific military objective, [56] or those which employ a method or means of combat the effects of which cannot be limited as required by the Protocol. [57] While most of the treaty norms pertaining to means and methods of warfare apply only in times of international armed conflict, international customary law applicable to non-international armed conflicts progressively evolved to contain the same rules in this regard. [58]

The overarching principle of IHL governing means and methods of warfare stipulates that the right of the parties to a conflict to choose means and methods of warfare is not unlimited. [59] The principles prohibiting the means and methods of warfare of a nature to cause superfluous injury or unnecessary suffering [60] and the principle prohibiting means and methods of warfare causing indiscriminate effects [61] are derived from this. Protocol I does not list the latter principle among the basic rules under the section on means and methods of warfare, but in the section on the protection of the civilian population against effects of hostilities. Indeed, this principle protects only civilians. Protocol I further prohibits means or methods of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment. [62]

The relationship between the general principles and the specific rules on weapons remains a delicate issue, notably concerning the extent to which the latter merely crystallize the former. For example, the prohibition to cause superfluous injury or unnecessary suffering is considered by some to outlaw in and of itself certain weapons in the absence of a particular rule, while others assert that it must be translated by States into specific prohibitions before it can produce proper legal effects. The latter approach is questionable, however, as it appears to confuse the normative value of the principle *per se* with the issue of its interpretation and application to specific weapons. First, it is well recognized that a weapon not covered by a specific norm remains regulated by the general principles. Second, States do rely on the principles themselves, including to prohibit methods of warfare.

Furthermore, the States parties to Protocol I are under an obligation to assess the legality of new weapons, means or methods of warfare, including in the light of the general principles. [63] General principles hence are legal rules with a normative value of their own.

Outside the Geneva Conventions and Protocols, IHL contains a series of prohibitions and limitations of use for specific weapons. Certain weapons are forbidden in all circumstances because of their characteristics, [64] while others are only governed by restrictions in use. [65] As several treaty regimes are in place, a weapon can be both prohibited and its use limited. [66]

Specific prohibited methods of warfare not particularly related to weapons primarily comprise the denial of quarter [67] and perfidy. [68] There is nevertheless no agreed list of specific prohibited methods, which may vary in State practice and according to scholars. Some include as specific prohibited methods of warfare those aimed at spreading terror, reprisals, the use of human shields, and the manipulation of the environment. Conversely, others treat those methods as distinct prohibitions, separate from the issue of methods.

Besides norms on means and methods of warfare per se, IHL also contains additional obligations with regard to the choice of means and methods when planning and deciding on an attack with a view to avoiding, and in any event to minimizing, incidental loss of civilian life, injury to civilians and damage to civilian objects. [69] Those precautionary measures in attack, while being designed with reference to the protection of civilians and civilian objects, might be considered relevant for other types of means and methods of warfare to ensure respect for all relevant norms of IHL.

The exact content and scope of the term “method of warfare” within the principles and rules of IHL that refer to it remain unclear. Indeed, although the prohibition of superfluous injury or unnecessary suffering traditionally concerns the nature of means of warfare, it also covers the way to use weapons as well as specific methods with particular features. Contemporary challenges in the field of the regulation of means and methods of warfare include the issue of the interaction between the general principles in the case of a means of warfare that allows for better compliance with IHL rules protecting civilians but conversely may cause superfluous injury or unnecessary suffering to combatants.

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- CRAWFORD Emily & PERT Alison, “Means and Methods of Warfare”, in CRAWFORD Emily & PERT Alison, *International Humanitarian Law*, Cambridge, CUP, 2015, pp. 195-234.
- ICRC, “Special Issue on Means of Warfare”, in *IRRC*, Vol. 87, No. 859, 2005, 604 pp.
- ICRC, WASZINK, Camilla & COUPLAND Robin Michael, COLLEGE D'EUROPE, “Current Perspectives on Regulating Means of Warfare: Proceedings of the Bruges Colloquium”, 18-19

October 2007, Collegium, *Nouvelles du Collège d'Europe*, No. 37, 2008, 168 pp.

- OETER Stefan, "Methods and Means of Combat", in FLECK Dieter (ed.), *Handbook of Humanitarian Law*, Oxford, OUP, 3rd ed., 2013, pp. 115-230.
- TURNS David, "At the 'Vanishing Point' of International Humanitarian Law: Methods and Means of Warfare in Non-International Armed Conflicts", in *German Yearbook of International Law = Jahrbuch für Internationales Recht*, Vol. 45, 2002, pp. 115-148.

#### Further reading:

- CASSESE Antonio, "Means of Warfare: The Traditional and the New Law", in CASSESE Antonio (ed.), *The New Humanitarian Law of Armed Conflict*, Naples, Editoriale Scientifica, 1976, pp. 161-198.
- MASSINGHAM Eve, "Conflict without casualties ... a note of caution: non-lethal weapons and international humanitarian law", in *IRRC*, Vol. 94, No. 886, 2012, pp. 673-685.
- NAHLAWI Yasmine, "Forcible displacement as a weapon of war in the Syrian conflict: lessons and developments", in KATSELLI PROUKAKI Elena (ed.), *Armed Conflict and Forcible Displacement*, London, Routledge, 2018, pp. 191-220.
- PARK Jennifer, "Sexual Violence as a Weapon of War in International Humanitarian Law", in *International Public Policy Review*, Vol. 3, No. 1, 2007, pp. 13-70.

## 1. The basic rule: Art. 35 of Protocol I

[CIHL, Rule 70]

#### Quotation

Part III: Methods and means of warfare [...]

Section I: Methods and means of warfare

Article 35 – Basic rules

1. In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited.
2. It is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering. [...]

[Source: Protocol I]

## ▲ CASES AND DOCUMENTS

- ICJ, Nuclear Weapons Advisory Opinion [Para. 78]

- United States, Memorandum of Law: The Use of Lasers as Anti-Personnel Weapons [Paras 4 and 8]
- Israel/Lebanon/Hezbollah, Conflict in 2006 [Part I, paras 249-263]
- United States, Surrendering in the Persian Gulf War
- Afghanistan, Assessment of ISAF Strategy
- Afghanistan, Code of Conduct of the Mujahideen [Art.41]
- ECHR, Isayeva v. Russia [Paras 19, 33, 165-167, 191]
- Georgia/Russia, Human Rights Watch's Report on the Conflict in South Ossetia [Paras 8, 20-22, 28]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 58-63]
- Autonomous Weapon Systems
- Switzerland, Voluntary Report on Implementation of IHL

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BOUTRUCHE Théo, *L'Interdiction des Maux Superflus : Contribution à l'Étude des Principes et Règles Relatifs aux Moyens et Méthodes de Guerre en Droit International Humanitaire*, Geneva, Thesis, Graduate Institute of International and Development Studies, Université de Genève, 2008, 559 pp.
- COUPLAND Robin M., *The SirUS Project: Towards a Determination of Which Weapons Cause 'Superfluous Injury or Unnecessary Suffering'*, Geneva, ICRC, 1997, 43 pp.
- COWLING M.G., "The Relationship between Military Necessity and the Principle of Superfluous Injury and Unnecessary Suffering in the Law of Armed Conflict", in *South African Yearbook of International Law*, Vol. 25, 2000, pp. 131-160.
- MEYROWITZ Henri, "The Principle of Superfluous Injury or Unnecessary Suffering: From the Declaration of St. Petersburg of 1868 to Additional Protocol I of 1977", in *IRRC*, No. 299, October 1994, pp. 98-122.

## 2. Prohibited or restricted use of weapons

### Introductory text

Lowering the level of cruelty between combatants and protecting those hors de combat and the civilian population in a more effective manner requires the regulation and, ultimately, the prohibition of certain means of warfare. To this end, several provisions of IHL applicable to international armed conflicts limit the means of warfare, i.e. weapons. [70] These provisions aim, in particular, to prohibit weapons causing "superfluous injury or unnecessary suffering". In practice, the application of this basic rule is always a compromise between military necessity and humanity, as the principle of "superfluous injury or unnecessary suffering" has been interpreted as referring to harm that would not be justified by military utility, either because of the lack of even the slightest utility or because utility is considerably outweighed by the suffering caused. Although this

standard may seem too vague to be effective, it has nevertheless led to efforts to prohibit and restrict certain conventional weapons [71] and weapons of mass destruction. [72] Although the Geneva Conventions and Additional Protocols limit means and methods of warfare (including those severely damaging the environment), [73] they neither prohibit nor restrict the use of any specific weapon; however, various other conventions do. [74] Recognizing that it is much easier to prohibit a weapon's use prior to its incorporation into a State's arsenal, Protocol I also places constraints on the development of new weapons. [75]

## - CASES AND DOCUMENTS

- ICRC, Protection of civilians against digital threats
- Iran/Iraq, UN Security Council Assessing Violations of International Humanitarian Law
- Case Study, Armed Conflicts in the former Yugoslavia [28]
- Israel/Palestine, Operation Protective Edge (Gaza, 13 June - 26 August 2014)
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [paras 273-274, 280]
- Switzerland, Voluntary Report on Implementation of IHL

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BOOTHBY William H., *Weapons and the Law of Armed Conflict*, New York, OUP, 2016, 450 pp.
- GREENWOOD Christopher, "The Law of Weaponry at the Start of the New Millennium", in *International Law Studies*, vol. 71, 1998, pp. 185-231.
- JHA U.C., "Prohibited Weapons in Armed Conflicts", in *ISIL Year Book of International Humanitarian and Refugee Law*, Vol. 4, 2004, pp. 56-78.
- MYJER Eric P., "Means and Methods of Warfare and the Coincidence of Norms between the Humanitarian Law of Armed Conflict and the Law of Arms Control", in HEERE Wybo P. (ed.), *International law and The Hague's 750th anniversary*, Cambridge, CUP, 1999, pp. 371-383.

### Further reading:

- BOOTHBY William H., "Differences in the Law of Waepony When Applied to Non-International Armed Conflicts", in *International Law Studies*, Vol. 88, 2012, pp. 197-210.
- BREHM Maya, "The Arms Trade and State's Duty to Ensure Respect for Humanitarian and Human Rights Law", in *Journal of Conflict and Security Law*, Vol. 12, Number 3, 2007, pp. 359-387.
- CLARK Roger S., "Building on Article 8(2)(b)(xx) of the Rome Statute of the International Criminal Court: Weapons and Methods of Warfare", in *New Criminal Law Review*, Vol. 12, No. 3, 2009, pp. 366-389.
- International Institute of Humanitarian Law, *The Proliferation of Weapons of Mass Destruction and*

*International Humanitarian Law: Current Challenges, Effective Responsives*, Sanremo, November 2007, 55 pp.

- KALSHOVEN Frits, "Arms, Armaments and International Law", in *Collected Courses*, Vol. 191, 1985, p. 183-341.
- ROBINSON Isabel & NOHLE Ellen, "Proportionality and precautions in attack: The reverberating effects of using explosive weapons in populated areas", in *IRRC*, Vol. 98, No. 1, pp. 107-145.
- SANDOZ Yves, *Des armes interdites en droit de la guerre*, Thesis, Geneva, Imp. Grounauer, 1975, 137 pp.
- TURNS David, "Weapons in the ICRC Study on Customary International Law", in *Journal of Conflict & Security Law*, Vol. 11, No. 2, 2006, pp. 201-237.
- VALLENTGOED Darren, "The Last Round? A Post-Gotovina Reassessment of the Legality of Using Artillery Against Build-Up Areas", in *Journal of Conflict and Security Law*, Vol. 18, No. 1, 2013, pp. 25-57.
- WIESENER Cornelius, "Tear Gas, Expanding Bullets and Plain-Clothed Personnel: The Interface Between Human Rights and Humanitarian Law in Modern Military Operations", in *Humanitäres Völkerrecht : Informationsschriften = Journal of international law of peace and armed conflict*, Vol. 30, No. 3-4, 2017, pp. 82-90.

#### **a. explosive bullets**

[CIHL, Rule 78]

#### **► SPECIFIC BIBLIOGRAPHY**

##### **Suggested reading:**

- KEEFER Scott, "Explosive Missals: International Law, Technology, and Security in Nineteenth-Century Disarmament Conferences", in *SAGE Journals*, Vol. 21, No. 4, 2014, pp. 445-464.

#### **b. dum-dum bullets**

[CIHL, Rule 77]

#### **► SPECIFIC BIBLIOGRAPHY**

##### **Suggested reading:**

- BRYDEN Alan, "Regimes Prohibiting the Use in War of Poison Gas and Dum Dum Bullets", in BRYDEN Alan, *International Law, Politics and Inhumane Weapons, The Effectiveness of Global Landmines Regimes*, London/New-York, Routledge, 2013, pp. 17-41.
- LUMDSEN Malvern, "New military technology and the erosion of international law: the case of dum-dum bullet today", in *Instant Research on Peace and Violence*, Vol. 4, No. 1, 1974, pp. 15-20.

## c. certain conventional weapons

### ▲ CASES AND DOCUMENTS

- Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons
- Amendment to Article 1 of the 1980 Convention, in Order to Extend it to Non-International Armed Conflicts
- Autonomous Weapon Systems

### ▲ SPECIFIC BIBLIOGRAPHY

#### Suggested reading:

- ICRC, "Report of the ICRC for the Review Conference of the 1980 UN Conventions on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to Have Indiscriminate Effects", in *IRRC*, No. 299, March-April 1994, pp. 123-182.
- KALSHOVEN Frits, "The Conventional Weapons Convention: Underlying Legal Principles", in *IRRC*, No. 279, 1990, pp. 510-520.
- FENWICK Charles G., "New Developments in the Law Concerning the Use of Conventional Weapons in Armed Conflict", in *CYIL*, Vol. 19, 1981, pp. 229-256.
- MATHEWS Robert J., "The 1980 Convention on Certain Conventional Weapons: A Useful Framework Despite Earlier Disappointments", in *IRRC*, No. 844, December 2001, pp. 991-1012.
- PARKS William H., "Conventional Weapons and Weapons Review", in *YIHL*, Vol. 8, 2005, 2007, pp. 55-142.
- SANDOZ Yves, "A New Step Forward in International Law: Prohibitions or Restriction on the Use of Certain Conventional Weapons. United Nations Conference on Prohibition or Restrictions of Use of Certain Conventional Weapons", in *IRRC*, No. 220, January 1981, pp. 3-18.

#### Further reading:

- AUBERT Maurice, "The International Committee of the Red Cross and the Problem of Excessively Injurious or Indiscriminate Weapons", in *IRRC*, No. 279, November-December 1990, pp. 477-497.
- BRETTON Philippe, "La Convention du 10 avril 1981 sur l'interdiction ou la limitation de certaines armes classiques qui peuvent être considérées comme produisant des effets traumatiques excessifs ou comme frappant sans discrimination", in *AFDI*, 1981, pp. 127-146.
- DÖRMANN Knut, "Conventional Disarmament: Nothing New on the Geneva Front?", in GIEGERICH Thomas (ed.), *A Wiser Century ?: Judicial Dispute Settlement, Disarmament and the Laws of War 100 Years After the Second Hague Peace Conference*, Berlin, Duncker and Humblot, 2009, pp. 143-

166.

- PROKOSCH Eric, "The Swiss Draft Protocol on Small-Calibre Weapon Systems", in *IRRC*, No. 307, July-August 1995, pp. 411-425.

aa) mines

[CIHL, Rules 80-83]

## ► CASES AND DOCUMENTS

- Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices, as amended on 3 May 1996 (Protocol II to the 1980 Convention)
- Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction
- Geneva Call, Puntland State of Somalia adhering to a total ban on anti-personnel mines

## ► SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BRYDEN Alan, *International Law, Politics and Inhumane Weapons, The Effectiveness of Global Landmines Regimes*, London/New-York, Routledge, 2013, 179 pp.
- MARESCA Louis & MASLEN Stuart (eds), *The Banning of Anti-Personnel Landmines: The Legal Contribution of the International Committee of the Red Cross [1955-1999]*, Cambridge, CUP, 2000, 670 pp.
- MASLEN Stuart, *Anti-Personnel Mines under Humanitarian Law: A View from the Vanishing Point*, Antwerp, Intersentia, Transnational Publishers, 2001, 327 pp.

### Further reading:

- CARNAHAN Burrus, "The Law of Land Mine Warfare: Protocol II to the United Nations Convention on Certain Conventional Weapons", in *Military Law Review*, Vol. 105, 1984, p. 73-95.
- CAUDERAY Gérald C., "Anti-Personnel Mines", in *IRRC*, No. 295, July-August 1993, pp. 273-287.
- DOSWALD-BECK Louise & CAUDERAY Gérald C., "The Development of New Anti-Personnel Weapons", in *IRRC*, No. 279, November-December 1990, pp. 565-577.
- ICRC, "Landmines Must be Stopped", in *ICRC*, September 1995, 65 pp.
- LETTS David, "Naval Mines: Legal Considerations in Armed Conflict and Peacetime", in *IRRC*, Vol. 98, No. 902, 2016, pp. 543-565.
- PETERS Ann, "Landmines in the 21st Century", in *International Relations*, Vol. 13, 1996, pp. 37-50.
- RAUCH Elmar, "The Protection of the Civilian Population in International Armed Conflicts and the Use of Land Mines", in *German Yearbook of International Law*, Vol. 24, 1981, p. 262-87.

- ROGERS Anthony P.V., "Mines, Booby-Traps and other Devices", in *IRRC*, No. 279, November-December 1990, pp. 521-534.
- SCHERER Sabine, "L'extinction des sentinelles éternelles, les mines antipersonnel", in *Défense nationale*, Vol. 55/12, 1999, pp. 91-103.
- SHARNETZKA Craig S., "The Oslo Land Mine Treaty and an Analysis of the United States Decision not to Sign", in *Dickinson Journal of International Law*, Vol. 16/3, 1998, pp. 661-689.
- MASLEN Stuart & HERBY Peter, "An International Ban on Anti-Personnel Mines: History and Negotiation of the 'Ottawa Treaty'", in *IRRC*, No. 325, December 1998, pp. 693-713.

bb) incendiary weapons

[CIHL, Rules 84 and 85]

## • CASES AND DOCUMENTS

- Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III to the 1980 Convention)
- Inter-American Commission on Human Rights, Tablada [Para. 186]

## • SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- KALSHOVEN Frits, "Incendiary Weapons: Legal and Humanitarian Aspects", in KALSHOVEN Frits, *Reflections on the Law of War*, Brill/Nijhoff, 2007, pp. 339-357.
- PARKS William H., "The Protocol on Incendiary Weapons", in *IRRC*, No. 279, November-December 1990, pp. 584-604.

### Further reading:

- JUREK Matthias, "White Phosphorus: An Outlawed Weapon?", in *Humanitäres Völkerrecht*, Vol. 21, No. 4, 2008, pp. 251-257.
- MACLEOD Iain J. & ROGERS Anthony P.V., "The Use of White Phosphorus and the Law of War", in *YIHL*, Vol. 10, 2009, pp. 75-97.
- REYHANI Roman, "The Legality of the use of White Phosphorus by the United State Military during the 2004 Fallujah assaults" in *University of Pennsylvania Journal of Law and Social Change*, Vol. 10, No. 1, 2007, pp. 1-45.

cc) non-detectable fragments

[CIHL, Rule 79]

## ▲ CASES AND DOCUMENTS

- Protocol on Non-Detectable Fragments (Protocol I to the 1980 Convention)

## ▲ SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- HENCKAERTS Jean-Marie & DOSWALD-BECK Louise, "Weapons Primarily Injuring by Non-Detectable Fragments (Rule 79)", in HENCKAERTS Jean-Marie & DOSWALD-BECK Louise, *Customary International Humanitarian Law, Volume I: Rules*, Cambridge, CUP, 2005, pp. 275-277.

dd) blinding weapons

[CIHL, Rule 86]

## ▲ CASES AND DOCUMENTS

- Protocol on Blinding Laser Weapons (Protocol IV to the 1980 Convention)
- United States, Memorandum of Law: The Use of Lasers as Anti-Personnel Weapons

## ▲ SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- CARNAHAN Burrus & ROBERTSON Marjorie, "The Protocol on Blinding Laser Weapons: A New Direction for Humanitarian Law", in *AJIL*, Vol. 90/3, 1996, pp. 484-490.
- DOSWALD-BECK Louise, "New Protocol on Blinding Laser Weapons", in *IRRC*, No. 312, May-June 1996, pp. 272-299.

### Further reading:

- PETERS Ann, "Blinding Laser Weapons: New Limits on the Technology of Warfare", in *Loyola of Los Angeles International and Comparative Law Journal*, Vol. 18, 1998, pp.733-766.

ee) explosive remnants of war

## ▲ CASES AND DOCUMENTS

- Protocol on Explosive Remnants of War (Protocol V to the 1980 Convention)
- Case Study, Armed Conflicts in the former Yugoslavia [28]

## ▲ SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- MARESCA Louis, "A New Protocol on Explosive Remnants of War: The History and Negotiation of Protocol V to the 1980 Convention on Certain Conventional Weapons", in *IRRC*, No. 856, December 2004, pp. 815-835.
- MARAUHN Thilo, "The Silent Threat: Explosive Remnants of War", in *Frieden in Freiheit = Peace in Liberty = Paix en liberté, Festschrift für Michael Bothe zum 70 Geburtstag*, Baden-Baden, Nomos, 2008, pp. 193-205.

ff) cluster munitions

## ▲ CASES AND DOCUMENTS

- Convention on Cluster Munitions
- Israel/Lebanon/Hezbollah, Conflict in 2006 [Paras 249-256]
- United States/United Kingdom, Conduct of the 2003 War in Iraq
- Afghanistan, Operation "Enduring Freedom" [Part A.]
- Georgia/Russia, Human Rights Watch's Report on the Conflict in South Ossetia [Paras 48-51, 65-74]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia [Paras 64-70]
- Cambodia/Thailand, Border Conflict around the Temple of Preah Vihear
- The armed conflict in Syria

## ▲ SPECIFIC BIBLIOGRAPHY

### Suggested reading:

BLACK-BRANCH Jonathan, "The Legal Status of Cluster Munitions under International Humanitarian Law: Indiscriminate Weapons of War", in *Humanitäres Völkerrecht: Informationsschriften = Journal of International Law of Peace and Armed Conflict*, Vol. 22, 2009, pp. 186-193.

BORRIE, John, UNIDIR, *Unacceptable Harm: a History of How the Treaty to Ban Cluster Munitions Was Won*, New York, Geneva, United Nations, 2009, 488 pp.

DAVID Eric, "La Convention de 2008 sur les armes à sous-munitions", in *RGDIP*, T. 113, No. 4, 2009, pp.

DI RUZZA Tommaso, "The Convention on Cluster Munitions: Towards a Balance Between Humanitarian and Military Considerations?", in *Military Law and the Law of War Review = Revue de droit militaire et de droit de la guerre*, Vol. 47, No. 3-4, 2008, pp. 405-448.

DOCHERTY Bonnie, "Breaking New Ground: the Convention on Cluster Munitions and the Evolution of International Humanitarian Law", in *Human Rights Quarterly*, Vol. 31, no. 4, November 2009, pp. 934-963.

Geneva International Centre for Humanitarian Demining (GICHD), *A Guide to Cluster Munitions*, Geneva, GICHD, 3rd ed., 2016, 236 pp.

NYSTUEN Gro & CASEY-MASELN Stuart, *The Convention on Cluster Munitions. A Commentary*, Oxford, OUP, 2010, 864 pp. RAPPERT Brian & MOYES Richard, "Enhancing the Protection of Civilians from Armed Conflict: Precautionary Lessons", in *Medicine, Conflict and Survival*, Vol. 26, No. 1, January-March 2010, pp. 24-47.

UNIDIR, *The Humanitarian Impact of Cluster Munitions*, Geneva, UNIDIR, 2008, 69 pp.

**Further reading:**

BARAK Eitan, "None to Be Trusted: Israel's Use of Cluster Munitions in the Second Lebanon War and the Case for the Convention on Cluster Munitions", in *American University International Law Review*, Vol. 25, No. 3, 2010, pp. 423-483.

BOOTHBY William, "Cluster Bombs: Is There a Case for New Law?", in *Harvard University Occasional Paper Series/ Program on Humanitarian and Conflict Research*, No. 5, 2005, 46 pp.

CAPATI Carmel, "The Tragedy of Cluster Bombs in Laos: An Argument for Inclusion in the Proposed International Ban on Landmines", in *Wisconsin International Law Journal*, Vol. 16/1, 1997, pp. 227-245.

HERTHEL Thomas J., "On the Chopping Block: Cluster Munitions and the Law of War", in *Air Force Law Review*, Vol. 59, 2001, pp. 229-268.

PROKOSCH Éric, "Arguments for Restricting Cluster Weapons: Humanitarian Protection Versus 'Military Necessity'", in *IRRC*, No. 299, March-April 1994, pp. 183-193.

WIEBE Virgil, "Footprints of Death: Cluster Bombs as Indiscriminate Weapons under International Humanitarian Law", in *MJIL*, Vol. 22/1, 2000, pp. 85-167.

gg) other weapons for which limitations are under discussion

- light weapons
- anti-vehicle mines
- fragmentation weapons

a. **chemical weapons**

[CIHL, Rules 74-76]

▲ **CASES AND DOCUMENTS**

- The Geneva Chemical Weapons Protocol

- Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction, Paris 13 January 1993
- Switzerland, Prohibition of the Use of Chemical Weapons
- UN/ICRC, The Use of Chemical Weapons

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BOTHE Michael (ed.), *The New Chemical Weapons Convention: Implementation and Prospects*, The Hague, Kluwer Law International, 1998, 613 pp.
- KRUTZSCH Walter & TRAPPS Ralph (eds), *A Commentary on the Chemical Weapons Convention*, Dordrecht, M. Nijhoff, 1994, 543 pp.
- SOLOMON Brian (ed.), *Chemical and Biological Warfare*, New York, Wilson, 1999, 158 pp.

### Further reading:

- NAQVI Jasmin, "Crossing the red line: the use of chemical weapons in Syria and what should happen now", in *IRRC*, Vol. 99, No. 906, 2017, pp. 959-993.
- GASPARINI Giovanni & RONZITTI Natalino (eds), *The Tenth Anniversary of the CWC's Entry into Force: Achievements and Problems*, Roma, Istituto Affari Internazionali, December 2007, 128 pp.
- HUNT Cecil, "The Potential Contribution of the Chemical Weapons Convention to Combating Terrorism", in *MJIL*, Vol. 20/3, 1999, pp. 523-535.
- International Institute of Humanitarian Law, *The Chemical Weapons Convention: between Disarmament and International Humanitarian Law: [international seminar]*, Sanremo, Italy, 15 February 2008, Sanremo, February 2008, 24 pp.

### a. poison

HR, Art. 23(a) [CIHL, Rule 72]

## - SPECIFIC BIBLIOGRAPHY

### Suggested reading:

BUNN Georges, "The Banning of Poison Gas and Germ Warfare: should the United States agree?", in *Wisconsin Law Review*, Vol. 69, No. 375, 1970, pp. 194-199.

### f. bacteriological and biological weapons

[CIHL, Rule 73]

## - CASES AND DOCUMENTS

- The Geneva Chemical Weapons Protocol
- Convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction, Paris 13 January 1993
- ICRC, Biotechnology, Weapons and Humanity

## - SPECIFIC BIBLIOGRAPHY

### **Suggested reading:**

DANDO Malcolm, "The Development of International Legal Constraints on Biological Warfare in the 20th Century", in *The Finnish Yearbook of International Law*, Vol. 8, 1997, pp. 1-69.

GOLDBLAT Jozef, "The Biological Weapons Convention – An Overview", in *IRRC*, No. 318, May-June 1997, pp. 251-265.

ROGERS Paul, "Biological Weapons", in *Medicine, Conflict and Survival*, Vol. 18/2, 2002, 105 pp.

SOLOMON Brian (ed.), *Chemical and Biological Warfare*, New York, Wilson, 1999, 158 pp.

ZILINSKAS Raymond A. (ed.), *Biological Warfare*, Boulder, Lynne Rienner Publishers, 2000, 309 pp.

### **Further reading:**

CLUNAN Anne L., LAVOY Peter & MARTIN Susan B. (eds), *Terrorism, War, or Disease? Unraveling the Use of Biological Weapons*, Stanford, Stanford Security Studies, 2008, 350 pp.

KELLMAN Barry, "Biological Terrorism: Legal Measures for Preventing Catastrophe", in *Harvard Journal of Law and Public Policy*, Vol. 24/2, 2001, p. 417-488.

LEDERBERG Joshua (ed.), *Biological Weapons: Limiting the Threat*, Cambridge, Massachusetts, MIT Press, 1999, 351 pp.

ZALUAR Achilles & MONTELEONE-NETO Roque, "The 1972 Biological Weapons Convention – A View from the South", in *IRRC*, No. 318, May-June 1997, pp. 295-308.

### **a. nuclear weapons**

#### **Quotation**

3. Mr. PAOLINI (France) made the following statement:

[...]

[A]lready in 1973, the French Government noted that the ICRC did not include any regulations on nuclear weapons in its drafts. In participating in the preparation of the additional Protocols, therefore, the French Government has taken into consideration only conflicts using conventional weapons. It accordingly wishes to stress that in its view the rules of the Protocols do not apply to the use of nuclear weapons.

**[Source:** Official Records of the Diplomatic Conference on the reaffirmation and development of International Humanitarian Law applicable in armed conflicts, Geneva (1974-1977), Federal Political Department, Bern, Vol. II, 1978, p. 193]

## • CASES AND DOCUMENTS

- ICJ, Nuclear Weapons Advisory Opinion [Paras 84-86, 95, and 105]
- France, Accession to Protocol I [Part B., para. 2]
- United Kingdom, Interpreting the Act of Implementation
- ICRC, Bringing the era of nuclear weapons to an end
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [paras 290, 292, 295-299]

## • SPECIFIC BIBLIOGRAPHY

### Suggested reading:

- BOISSON DE CHAZOURNES Laurence & SANDS Philippe (eds), *International Law, the International Court of Justice and Nuclear Weapons*, Cambridge, CUP, 1999, 592 pp.
- BORRIE John, "Humanitarian reframing of nuclear weapons and the logic of a ban", in *International Affairs*, Vol. 90, No. 3, May 2014, pp. 625–646.
- MATHESON Michael J., "The Opinions of the International Court of Justice on the Threat or Use of Nuclear Weapons", in *American Journal of International Law*, Vol. 91, No. 3, 1997, pp. 417-435.
- Serge (ed.), *Le droit international des armes nucléaires : journée d'études*, Paris, Pedone, 1998, 206 pp.
- VAIL Christopher, "The Legality of Nuclear Weapons for Use and Deterrence", in *Georgetown Journal of International Law*, Vol. 48, No. 3, 2017, pp. 839-872.
- "Special Issue: The Advisory Opinion of the International Court of Justice on the Legality of Nuclear Weapons and International Humanitarian Law", in *IRRC*, No. 316, February 1997, p. 3 ff (articles of CONDORELLI Luigi, DAVID Éric, DOSWALD-BECK Louise and GREENWOOD Christopher).

### Further reading:

- BARRILLOT Bruno & RICHARD Claudine-Mariko, *Les armes à uranium appauvri : jalons pour une interdiction*, Brussels, Complexe, 2001, 105 pp.
- BRING Ove E. & REIMAN H.B., "Redressing a Wrong Question: The 1977 Protocols Additional to the 1949 Geneva Conventions and the Issue of Nuclear Weapons", in *Netherlands International Law Review*, Vol. 21, 1986, pp. 99-105.
- BURTON Jeremy T., "Depleted Morality: Yugoslavia v. Ten NATO Members and Depleted Uranium", in *Wisconsin International Law Journal*, Vol. 19/1, 2000, pp. 17-40.
- CRAWFORD James, "Legal Aspects of a Nuclear Weapons Convention", in *African Yearbook of International Law*, Vol. 6, 1998, pp. 153-179.
- FALK Richard A., "The Shimoda Case: A Legal Appraisal of the Atomic Attacks upon Hiroshima and Nagasaki", in *AJIL*, Vol. 59, 1966, pp. 759-793.

- GARCIA RICO Elena del Mar, *El uso de las armas nucleares y el derecho internacional: análisis sobre la legalidad de su empleo*, Madrid, Tecnos, 1999, 191 pp.
- KOPPE Erik, *The Use of Nuclear Weapons and the Protection of the Environment During International Armed Conflict*, Portland, Hart Publishing, 2008, 447 pp.
- MEYROWITZ Henri, “La stratégie nucléaire et le Protocole additionnel I aux Conventions de Genève de 1949”, in *RGDIP*, Vol. 83/4, 1979, pp. 905-961.

#### a. “new means and methods”

P I, Art. 36

As a measure of precaution, Art. 36 of Protocol I requires the States Parties to assess whether the use of any new weapon or of any new method of warfare that they develop or plan to acquire or deploy in operations is allowed by, and compatible with, international law.

The rapid evolution of new military technologies and the development of potentially devastating means and methods of warfare lends added resonance to this legal review.

The parties to Protocol I are obliged to conduct such reviews, but it would also be appropriate for States that are not parties to Protocol I to do so. This would allow them to verify that their armed forces act in conformity with international rules regulating the use of means and methods of warfare.

Art. 36 does not specify the practical modalities of such reviews, which are left to the parties to decide. It is understood that the legal review should cover the weapons themselves and the ways in which they might be used. Particular attention should be paid to the potential effect of the weapon concerned on both civilians (prohibition of indiscriminate effects) and combatants (prohibition of unnecessary suffering).

### ▲ CASES AND DOCUMENTS

- Artificial Intelligence use for Military Purposes
- United States, Use of Autonomous Weapons
- ICRC, New Weapons
- United States, Memorandum of Law: The Use of Lasers as Anti-Personnel Weapons [Para. 2]
- UN, Statement of a Special Rapporteur on Drone Attacks
- US: Obama’s Speech on Drone Policy
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2011
- Autonomous Weapon Systems
- General Assembly, The use of drones in counter-terrorism operations
- U.S., Lethal Operations against Al-Qa’ida Leaders
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [paras 221-241]

- Switzerland, Voluntary Report on Implementation of IHL

## - SPECIFIC BIBLIOGRAPHY

### **Suggested reading:**

BOOTHBY William (ed.), *Dehumanization in Warfare: Legal Implications of New Weapons Technologies*, Cham, Springer, 2018, 243 pp.

DAOUST Isabelle, COUPLAND Robin & HISHOEY Rikke, "New Wars, New Weapons?: The Obligation of States to Assess the Legality of Means and Methods of Warfare", in *IRRC*, No. 846, June 2002, pp. 345-363.

DOSWALD-BECK Louise & CAUDERAY Gérald C., "The Development of New Anti-Personnel Weapons", in *IRRC*, No. 279, November-December 1990, pp. 565-577.

GOW James, DIJXHOORN Ernst, KERR Rachel, VERDIRAME Guglielmo (eds.), *Routledge Handbook of War, Law and Technology*, New-York, Routledge, 2019, 448 pp.

GRUT Chantal, "The Challenge of Autonomous Lethal Robotics to International Humanitarian Law", in *Journal of Conflict and Security*, Vol. 18, No. 1, 2013, pp. 5-23.

HUGUES Joshua G., "The law of armed conflict issues created by programming automatic target recognition systems using deep learning methods", in *Yearbook of International Humanitarian Law*, Vol. 21, 2018, pp. 99-135.

ICRC, *A Guide to Legal Review of New Weapons, Means and Methods of Warfare. Measures to Implement Art. 36*, Geneva, ICRC, 2007, 34 pp.

JENSEN Eric Talbot & ALCALA Ronald T.P. (eds.), *The Impact of Emerging Technologies on the Law of Armed Conflict*, Oxford, OUP, 2019, 389 pp.

KRÜGER-SPRENGEL Friedhelm, "Non-Lethal Weapons: A Humanitarian Perspective in Modern Conflict", in *RDMDG*, Vol. 42/3-4, 2003, pp. 357-377.

LAWAND Kathleen, "Reviewing the Legality of New Weapons, Means and Methods of Warfare", in *IRRC*, December 2006, pp. 925-930.

LIU Hin-Yan, "From the autonomy framework towards networks and systems approaches for 'autonomous' weapons systems", in *Journal of International Humanitarian Studies*, Vol. 10, No. 1, 2019, pp. 89-110.

LIU Hin-Yan, VAN ROMPAEY Leonard & MAAS Matthijs M., "Symposium : beyond killer robots : networked artificial intelligence systems disrupting the battlefield", in *Journal of International Humanitarian Legal Studies*, Vol. 10, No. 1, 2019, pp. 77-202.

OHLIN Jens David (Ed.), *Research Handbook on Remote Warfare*, Northampton, Edward Elgar, 2017, 528 pp.

SASSOLI Marco, "Autonomous Weapons and International Humanitarian Law: Advantages, Open Technical Questions and Legal Issues to be Clarified", in *International Law Studies*, Vol. 90, 2014, pp. 308-340.

SAXON Dan (ed.), *International Humanitarian Law and the Changing Technology of War*, Leiden, Boston, Nijhoff, 2013, 357 pp.

SCHMITT Michael N., *War, Technology, and International Humanitarian Law*, Cambridge, Program on Humanitarian Policy and Conflict Research, 2005, 62 pp.

SCHMITT Michael N., "Autonomous Weapon Systems and International Humanitarian Law: A Reply to the

Critics", in *Harvard National Security Journal Features*, 2013, 37 pp.

**Further reading:**

BROWN Davis, "A Proposal for an International Convention to Regulate the Use of Information Systems in Armed Conflict", in *Harvard International Law Journal*, Vol. 47, No. 1, 2006, pp. 179-221.

EDDAZI Fouad, *Le droit à l'épreuve des drones militaires*, Paris, LGDJ, 2019, 376 pp.

FRY James D., "Contextualized Legal Reviews for the Methods and Means of Warfare: Cave Combat and International Humanitarian Law", in *Columbia Journal of Transnational Law*, Vol. 44, No. 2, 2006, pp. 453-519.

HEYNS Christof, AKANDE Dapo, HILL-CAWTHORNE Lawrence & CHENGETA Thompson, "The International Law Framework Regulating the Use of Armed Drones", in *International and Comparative Law Quarterly*, Vol. 65, No. 4, 2016, pp. 791-827.

JENKS Chris, "Law from Above: Unmanned Aerial Systems, Use of Force, and the Law of Armed Conflict", in *North Dakota Law Review*, Vol. 85, No. 3, pp. 649-671.

KAURIN Pauline, "With Fear and Trembling: an Ethical Framework for Non-Lethal Weapons", in *Journal of Military Ethics*, Vol. 9, No. 1, 2010, pp. 100-114.

KOPLOW David A., "ASAT-isfaction: Customary International Law and the Regulation of Anti-Satellite Weapons", in *Michigan Journal of International Law*, Vol. 30, No. 4, 2009, pp. 1187-1272.

MCCELLAND Justin, "The Review of Weapons in Accordance with Article 36 of Additional Protocol I", in *IRRC*, No. 850, June 2003, pp. 397-415.

MAAS Matthijs M., "Innovation-Proof Global Governance for Military Artificial Intelligence? How I Learned to Stop Worrying, and Love the Bot", in *Journal of International Humanitarian Legal Studies*, Vol. 10, No. 1, 2019, pp. 129-157.

NASU Hitoshi, "Nanotechnology and Challenges to International Humanitarian Law: A Preliminary Legal Assessment", in *IRRC*, Vol. 94, No. 886, 2012, pp. 653-672

O'CONNELL Mary Ellen, "Unlawful Killing with Combat Drones: a Case Study of Pakistan", in *Notre Dame Law School Legal Studies Research Paper*, No. 09-43, 2009, 26 pp.

PEJIC Jelena, "Extraterritorial targeting by means of armed drones: Some legal implications", in *IRRC*, Vol. 96, No. 893, 2015, pp. 67-106.

PUCKETT Christopher, "Comment: In This Era of 'Smart Weapons', is a State under an International Legal Obligation to Use Precision-Guided Technology in Armed Conflict?", in *Emory International Law Review*, Vol. 18, 2004, pp. 645-723.

RATNER Mark A. & RATNER Daniel, *Nanotechnology and homeland security: new weapons, new wars*, Upper Saddle River, Prentice Hall, 2003, 176 pp.

RID Thomas & HECKER Marc, *War 2.0: Irregular Warfare in the Information Age*, Westport, London, Praeger Security International, 2009, 280 pp.

SCHMITT Michael N. & GODDART David S., "International Law and the Military Use of Unmanned Maritime Systems", in *IRRC*, Vol. 98, No. 902, 2016, pp. 567-592.

SUKMAN Daniel, "Lethal Autonomous Systems and the Future of Warfare", in *Canadian Military Journal*, Vol. 16, 2015, pp. 44-53.

### 3. Prohibited methods of warfare

#### Introductory text

The concept of method of warfare encompasses any tactical or strategic procedure meant to outweigh or weaken the adversary.

The limitations or prohibitions to resort to specific methods of warfare stipulated in IHL are predicated on three premises:

- the choice of the methods of warfare is not unlimited; [76]
- the use of methods of a nature to cause unnecessary suffering or superfluous injury is forbidden; [77]
- the only legitimate object of war is to weaken the military forces of the enemy. [78]

Contemporary IHL forbids, for instance, methods of warfare involving terror, [79] starvation, [80] reprisals against protected persons and objects, [81] pillage, [82] the taking of hostages, [83] enforced enrolment of protected persons [84] and deportations. [85]

Under the specific heading “prohibited methods of warfare”, two methods of warfare are usually discussed, namely perfidy and denial of quarter.

Unlike ruses of war, [86] which are lawful, perfidy [87] is outlawed in IHL. Ruses of war are intended to mislead an adversary or to induce him to act recklessly. Perfidy, on the contrary, invites the confidence of an adversary and leads him to believe that he is entitled to or is obliged to provide protection under the rules of IHL.

The main aim of the prohibition of the denial of quarter [88] is to protect combatants when they fall into enemy hands by ensuring that they will not be killed. The objective is to prevent the following acts: to order that there shall be no survivors, to threaten the adversary therewith, or to conduct hostilities on this basis.

Most cases of perfidy and denial of quarter are grave breaches of IHL and hence war crimes.

#### ► CASES AND DOCUMENTS

- Colombia, Constitutionality of IHL Implementing Legislation [Paras 4, D.5.4.4, E.2 and Dissenting opinion]
- Afghanistan, Code of Conduct for the Mujahideen [Arts 7-9, 23-25, 54]
- Georgia/Russia, Human Rights Watch's Report on the Conflict in South Ossetia [Paras 75, 79, 82-83, 87-89]
- Georgia/Russia, Independent International Fact-Finding Mission on the Conflict in South Ossetia

a. giving or ordering no quarter

P I, Art. 40 [CIHL, Rule 46]

► CASES AND DOCUMENTS

- British Policy Towards German Shipwrecked
- Belgium, Public Prosecutor v. G.W.
- Israel, Navy Sinks Dinghy off Lebanon
- ICRC, Iran/Iraq Memoranda
- United States, Surrendering in the Persian Gulf War
- Inter-American Commission on Human Rights, Tablada [Paras 182-185]
- Civil War in Nepal

► SPECIFIC BIBLIOGRAPHY

**Suggested reading:**

- BUCHAN Russel, "The Rule of Surrender in International Humanitarian Law", in *Israel Law Review*, Vol. 51, No. 1, 2018, pp. 3-27.
- RAJAN Sanoj & NAIN Yashasvi, "Denial of Quarter: A Critique on Cyber Warfare", in *AALCO Journal of International Law*, Vol. 3, No. 2, 2014, pp. 119-138.
- TAYLOR Leonard F., *There Shall Be Survivors: The Prohibition of the Denial of Quarter in International Law*, 2009, 54 pp.

a. perfidy:the distinction between perfidy and permissible ruses of war

P I, Art. 37 [CIHL, Rules 57-65]

► CASES AND DOCUMENTS

- United States Military Court in Germany, Trial of Skorzeny and Others
- Bosnia and Herzegovina, Using Uniforms of Peacekeepers

► SPECIFIC BIBLIOGRAPHY

**Suggested reading:**

FLECK Dieter, "Ruses of War and Prohibition of Perfidy", in *RDMGD*, Vol. 13/2, 1974, pp. 269-314.

MADDEN Mike, "Of Wolves and Sheep: A Purposive Analysis of Perfidy Prohibitions in International Humanitarian Law", in *Journal of Conflict and Security Law*, Vol. 17, No. 3, 2012, pp. 439-463.

WATTS Sean, "Law-of-War Perfidy", in *Military Law Review*, Vol. 219, 2014, pp. 106-175.

#### **Further reading:**

CLARKE Robert, "The Club-K Anti-Ship Missile System: A Case Study in Perfidy and its Repression", in *Human Rights Brief*, Vol. 20, No. 1, 2012, pp. 22-28.

HALL Mary T., "False Colors and Dummy Ships: The Use of Ruse in Naval Warfare", in *Readings on International Law from the Naval War College Review*, 1995, pp. 491-500.

HECHT Ben, *Perfidy*, New York, Messner, 1961, 281 pp.

JOBST Valentine, "Is the Wearing of the Enemy's Uniform a Violation of the Laws of War?", in *AJIL*, Vol. 35/3, 1941, pp. 435-442.

JON HELLER Kevin, "Disguising a Military Object as a Civilian Object: Prohibited Perfidy or Permissible Ruse of War?", in *International Law Studies*, Vol. 91, 2015, pp. 517-539.

#### **wearing of enemy uniforms**

#### **► CASES AND DOCUMENTS**

- United States Military Court in Germany, Trial of Skorzeny and Others
- Bosnia and Herzegovina, Using Uniforms of Peacekeepers

#### **a. starvation of civilians**

(See infra, Conduct of Hostilities, IV. International Humanitarian Law and Humanitarian Assistance)

#### **► CASES AND DOCUMENTS**

- Angola, Famine as a Weapon
- The armed conflict in Syria
- Israel, Blockade of Gaza and the Flotilla Incident
- Yemen: Naval Blockade
- Yemen, Potential Existence and Effects of Naval Blockade

#### **► SPECIFIC BIBLIOGRAPHY**

#### **Suggested reading:**

DINSTEIN Yoram, "Siege Warfare and the Starvation of Civilians", in DELISSEN Astrid J.-M. & TANJA Gerard J. (eds), *Humanitarian Law of Armed Conflicts, Challenges Ahead, Essays in Honour of Frits Kalshoven*, Dordrecht, M. Nijhoff, 1991, pp. 145-152.

DREW Philip, *The Law of Maritime Blockade: Past, Present, and Future*, Oxford, OUP, 2017, 168 pp.

HUTTER Simone, *Starvation as a Weapon, Domestic Policies of Deliberate Starvation as a Means to an End under International Law*, Leiden, Boston, Brill, Nijhoff, 2015, 306 pp.

MARCUS David, "Famines Crimes in International Law", in *The American Journal of International Law*, Vol.

97, No. 2, 2003, pp. 245-281.

MAYER Jean, "Starvation as a Weapon", in ROSE Steven (ed.), *CBW: Chemical and Biological Warfare*, London conference on CBW, London, Harrap, 1968, pp. 76-84.

#### **Further reading:**

DREW Phillip J., "Blockade? A legal assessment of the Maritime Interdiction of Yemen's ports", in *Journal of Conflict and Security Law*, Vol. 24, No. 1, 2019, pp. 35-52.

LINTON Suzannah, "International Humanitarian Law in Occupied East Timor: Displacement, Relocation and Famine", in LINTON Suzannah, McCORMACK Tim & SIVAKUMARAN Sandesh (Eds.), *Asia-Pacific Perspectives on International Humanitarian Law*, Cambridge, CUP, 2019, pp. 400-422.

MATHIAS Samira, "The silent killer: The inadequacy of the present ICC framework in criminalizing starvation as NIAC warfare", *Cambridge International Law Journal*, 2018.

## **4. Cyber warfare**

The term cyber warfare can be defined as the means and methods of warfare that rely on information technology and are used in situations of armed conflict. The second part of the definition is of importance: IHL will only apply to cyber operations occurring during – or triggering by themselves – an armed conflict. The debates on whether a cyber-attack may amount to a "use of force" or even an "armed attack" under the UN Charter, which are ius ad bellum issues, are distinct, but parallel to the question of whether a cyber-attack alone can trigger the applicability of the IHL of international or of non-international armed conflicts. Determining the beginning of an armed conflict itself remains tricky in situations where cyber-attacks are employed alone, short of any kinetic use of force. It is argued that the respective traditional thresholds for international and non-international armed conflict should also be applied in such situations [89]. Even then, in practice, the nature of information technology often makes it difficult to attribute an attack to a State or to an armed group (which is important to differentiate international from non-international armed conflicts) or to determine the existence of a sufficiently organized armed group (which is necessary to trigger IHL of non-international armed conflicts).

Once the applicability of IHL is triggered, the question becomes one of the adaptability of the rules on the conduct of hostilities. Do cyber attacks amount to "attacks" in the sense of Article 49 of Protocol I [90]? Is it necessary for them to result in physical consequences such as destruction of objects or injury or death of persons? Some argue that acts resulting in mere destruction of data, i.e. interference with information systems, should also be considered as amounting to attacks at least if they have a considerable effect upon the targeted party [91]. This question is conceptually distinct from the above-mentioned question of when a cyber operation triggers an armed conflict, but similar elements may be decisive for both answers.

If considered an attack under the IHL meaning, a cyber operation will have to comply with the principles of distinction, proportionality and precautions.

Looking at distinction first, the principle is put at stake by the nature of information networks: with most military networks relying on civilian infrastructure (optic cables, satellites, etc.), the latter virtually becomes a "dual use" object with both civilian and military functions, leading to increased difficulties in effectively identifying military objectives. In addition, while destruction of information is at the centre of the majority of cyber operations, military objectives are circumscribed to objects under IHL [92]. As a consequence, the question arises of whether data, which is by definition intangible, can ever be considered a legitimate target. With regards to persons, may a hacker operating for a party to an armed conflict be considered as directly participating in hostilities?

Second, applying the principle of proportionality to cyber operations is not an evident task either. The interconnected nature of cyber space means that any act may result in infinite reverberating or "knock-on" effects, which may easily be considered disproportionate in relation to the concrete and direct military advantage anticipated [93]. Another recurring question concerns the attacks that do not result in any destruction or loss of life, but only in mere inconvenience for civilians, mainly because civilian objects are rendered inoperative for a certain amount of time. Inconvenience not being included in the definition of proportionality, a majority of experts conclude that "inconvenience, irritation, stress, or fear [...] do not qualify as collateral damage because they do not amount to "incidental loss of civilian life, injury to civilians, damage to civilian objects" [94].

Finally, as one can imagine, the issue of interconnectedness also affects the principle of precaution, in particular the obligation for parties to take passive precautions in segregating between military objectives and the civilian population and civilian objects [95].

In the light of such new challenges, legal experts met in Tallinn to discuss whether and how the rules of IHL could actually be applied to cyber operations. This resulted in the *Tallinn Manual on the International Law Applicable to Cyber Warfare* [96], which brings some clarification to some of the issues mentioned here as well as to numerous other ones, and at least presents the remaining controversies. In the end, it is essential to continue the discussion in order to determine whether the traditional rules of IHL provide sufficient protection to civilians from the effects of warfare, keeping in mind the enormous humanitarian impact that some cyber operations may have in the real world. It may be that this is one of the few fields in which the existing rules of IHL are indeed inadequate, because of the completely different environment in which cyber operations are conducted and because they are necessarily either over-inclusive or under-inclusive on some issues. Until such new regulation is in force, the existing rules have anyway to be applied according to their object and purpose. The Tallinn Manual makes many useful suggestions in this respect.

## ▲ CASES AND DOCUMENTS

- ICRC, Protection of civilians against digital threats
- Iran, Victim of Cyberwarfare

- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2011
- ICRC, International humanitarian law and the challenges of contemporary armed conflicts in 2015 [paras 197-221]

## - SPECIFIC BIBLIOGRAPHY

### **Suggested reading:**

BEARD Jack M., "Law and War in the Virtual Era", in *AJIL*, Vol. 103, No. 3, July 2009, pp. 409-445

CRAWFORD Emily, "Virtual Battlegrounds: Direct Participation in Cyber Warfare", in *Sydney Law School Legal Studies Research Paper*, No. 12/10, 2012, 20 pp.

DINNISS Heather Harrison, *Cyber Warfare and the Laws of War*, Cambridge, Cambridge University Press, 2012, 331 pp.

DROEGE Cordula, "Get off my cloud: cyber warfare, international humanitarian law, and the protection of civilians", in *IRRC*, Vol. 94, No. 886, 2012, p.533-578.

GEISS Robin & LAHMANN Henning, "Cyber Warfare: Applying the Principle of Distinction in an Interconnected Space", in *Israel Law Review*, Vol. 45, No. 3, 2012, pp. 381-399.

GISEL Laurent, RODENHAUSER Tilman & DORMANN Knut, "Twenty years on: International humanitarian law and the protection of civilians against the effects of cyber operations during armed conflicts", in *IRRC*, Vol. 102, No. 913, 2020, pp. 287-334.

GRAHAM David E., "Cyber Threats and the Law of War", in *Journal of National Security Law and Policy*, Vol. 4, No. 1, 2010, pp. 87-102.

HATHAWAY Oona A., CROOTOF Rebecca, LEVITZ Philip, NIX Haley, NOWLAN Aileen, PERDUE William & SIEGEL Julia, "The Law of Cyber-Attack", in *California Law Review*, Vol. 100, 2012, pp. 817-885

ICRC, *Cyber warfare and international humanitarian law: The ICRC's position*, 2013, 4 pp.

JENSEN Eric Talbot, "Cyber Attacks, Proportionality and Precautions in Attack", in *International Legal Studies*, Vol. 89, 2013, pp. 198-217.

JENSEN Eric Talbot, "Cyber Warfare and Precautions Against the Effects of Attacks", in *Texas Law Review*, Vol. 88, 2010, pp. 1533-1569

KELSEY Jeffrey T. G., "Hacking Into International Humanitarian Law: the Principles of Distinction and Neutrality in the Age of Cyber Warfare", in *Michigan Law Review*, Vol. 106, No. 7, May 2008, pp. 1427-1451.

KESSLER Oliver & WERNER Wouter, "Expertise, Uncertainty, and International Law: A Study of the Tallinn Manual on Cyberwarfare", in *Leiden Journal of International Law*, Vol. 26, No. 04, 2013, pp 793-810.

KODAR Erki, "Computer Network Attacks in the Grey Areas of Jus ad Bellum and Jus in Bello", in *Baltic Yearbook of International Law*, Vol. 9, 2009, pp. 133-155.

LUBELL Noam, "Lawful Targets in Cyber Operations: Does the Principle of Distinction Apply?", in *International Law Studies*, Vol. 89, 2013, pp. 252-275.

MELZER Nils, *Cyberwarfare and International Law*, United Nations Institute for Disarmament Research (UNIDIR) Resources, 2011, 38 pp.

OHLIN Jens David, GOVERN Kevin & FINKELSTEIN Claire, *Cyber War: Law and Ethics for Virtual Conflicts*,

Oxford, OUP, 2015, 320 pp.

PALOJARVI Pia, *A Battle in Bits and Bytes: Computer Network Attacks and the Law of Armed Conflict*,

Helsinki, The Erik Castrén Institute of International Law and Human Rights, 2009, 186 pp.

RID Thomas & HECKER Marc, *War 2.0: Irregular Warfare in the Information Age*, Westport, London, Praeger Security International, 2009, 280 pp.

ROSCINI Marco, *Cyber Operations and the Use of Force in International Law*, Oxford, OUP, 2014, 307 pp.

SCHAAP Arie J., "Cyber Warfare Operations: Development and Use under International Law", in *The Air Force Law Review*, vol. 64, 2009, pp. 121-173.

SCHMITT Michael N. (ed.), *Tallinn Manual 2.0 on the International Law Applicable to Cyber Operations*, Cambridge, CUP, 2nd ed., 2017, 598 pp.

SCHMITT Michael N., "Classification of Cyber Conflict", in *Journal of Conflict & Security Law*, Vol. 17, No. 2, 2012, pp. 245–260.

SCHMITT Michael N., "The Law of Cyber Warfare: Quo Vadis?", in *SLPR*, No. 25, 2014, pp. 269-299.

TODD Graham H., "Armed Attack in Cyberspace: Deterring Asymmetric Warfare with an Asymmetric Definition", in *The Air Force Law Review*, vol. 64, 2009, pp. 65-102.

WALLACE David col., "Cyber Weapon Reviews under International Humanitarian Law: A Critical Analysis", in *Tallinn Paper*, No. 11, 2018, 22 pp.

#### **Further reading:**

BROWN Davis, "A Proposal for an International Convention to Regulate the Use of Information Systems in Armed Conflict", in *Harvard International Law Journal*, vol. 47, No. 1, 2006, pp. 179-221.

GEIß Robin, "Cyber Warfare: Implications for Non-international Armed Conflicts", in *International Law Studies*, Vol. 89, 2013, pp. 627-645.

RALTACHEV Christo C., *Cybergewalt*, Dissertation, Fribourg/Sofia, 2013, 235 pp.

STEVENS Sharon R., "Internet War Crimes Tribunals and Security in an Interconnected World", in *Transnational Law and Contemporary Problems*, Vol. 18, Issue 3, 2009, pp. 657-720

SCHMITT Michael N., *Tallinn Manual on the International Law Applicable to Cyber Warfare*, Cambridge, CUP, 1st ed., 2013, 282 pp.

SCHMITT Michael N. & VIHUL Liis, "The International Law of Attribution During Proxy "Wars" in Cyberspace", in *Fletcher Security Review*, Vol. I (II), 2014, pp. 55-73.

THÜMMLER Juliane, *Computernetzwerkoperationen innerhalb internationaler bewaffneter Konflikte*, Dissertation, Hamburg, 2011, 273 pp.

#### **Footnotes**

- [51] See P I, Part III, Section I
- [52] See St Petersburg Declaration of 1868, Preamble; HR, Art. 23(e)
- [53] See St Petersburg Declaration of 1868
- [54] See Declaration Concerning Expanding Bullets (adopted by the First Hague Peace Conference of 1899)
- [55] See HR, Art 23(b)

- [56] See P I, Art. 51(4)(b)
- [57] See P I, Art. 51(4)(c)
- [58] See ICRC, Customary International Humanitarian Law and ICTY, *The Prosecutor v. Tadic* [Part A., para. 125],
- [59] See HR, Art. 22; P I, Art. 35(1)
- [60] See P I, Art. 35(2)
- [61] See P I, Art. 51(4)
- [62] See P I, Arts 35(3) and 55(1)
- [63] See P I, Art. 36
- [64] See Protocol on Blinding Laser Weapons (Protocol IV to the 1980 Convention)
- [65] See Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III to the 1980 Convention)
- [66] See, for example, the antipersonnel mines regime set out in the 1997 Ottawa Convention [Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction] and Art. 3(3) of the Protocol on Mines, Booby-Traps and Other Devices [Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices, as amended on 3 May 1996 (Protocol II to the 1980 Convention)].
- [67] See HR, Art. 23(d); P I, Art. 40
- [68] See P I, Art. 37
- [69] See P I, Art. 57(2)(a)(ii)
- [70] See HR, Arts 22 and 23(e); P I, Art. 35
- [71] For example, dum-dum bullets, mines, incendiary weapons, non-detectable fragments, and cluster munitions.
- [72] For example, chemical weapons, use of poison, bacteriological and biological weapons, and – without success – nuclear weapons.
- [73] See P I, Arts 35(3) and 55; see also Convention of 10 December 1976 on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, Geneva, May 18, 1977
- [74] For example, the Declaration Concerning Expanding Bullets (adopted by the First Hague Peace Conference of 1899); the 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare [**The Geneva Chemical Weapons Protocol**] (extending the Hague Regulation of 1899 prohibiting use of “poison or poisoned weapons”); the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction [See ICRC, *Biotechnology, Weapons and Humanity* [Part A.]], and the 1980 UN Convention on the Prohibitions or Restrictions of Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects and subsequent Protocols [See: Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons, Amendment to Article 1 of the 1980 Convention, in Order to Extend it to Non-International Armed Conflicts, Protocol on Non-Detectable Fragments (Protocol I to the 1980 Convention), Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III to the 1980 Convention), Protocol on Blinding Laser Weapons (Protocol IV to the 1980 Convention), Protocol on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other

Devices, as amended on 3 May, 1996 (Protocol II to the 1980 Convention), Protocol on Explosive Remnants of War (Protocol V to the 1980 Convention)].

- [75] See P I, Art. 36
- [76] See HR, Art. 22; P I, Art. 35(1)
- [77] See HR, Art. 23(e); P I, Art. 35(2)
- [78] See 1868 St Petersburg Declaration, Preamble
- [79] See P I, Art. 51(2); P II, Art. 13
- [80] See P I, Art. 54; P II, Art. 14
- [81] See GC I-IV, Arts 46/47/13(3)/33 respectively; P I, Arts 20 and 41-56
- [82] See HR, Arts 28 and 47; GC I, Art. 15; GC II, Art. 18; GC IV, Arts 16 and 33; P II, Art. 4
- [83] See GC I-IV, common Art. 3; GC IV, Art. 34; P I, Art. 75
- [84] See GC III, Art. 130; GC IV, Art. 51
- [85] See GC IV, Art. 49; P II, Art. 17; see also *supra*, Civilian Population, IV. Special Rules on Occupied Territories
- [86] See HR, Art. 24; P I, Art. 37(2)
- [87] See HR, Art. 23; P I, Art. 40
- [88] See HR, Art. 23(b); P I, Art. 37(1)
- [89] See The Law > Fundamentals of IHL > B. International Humanitarian Law as a Branch of Public International Law > III. International Humanitarian Law: a branch of international law governing the conduct of States and individuals > Situations of Application:  
[https://www.icrc.org/casebook/doc/book-chapter/fundamentals-ihl-book-chapter.htm#b\\_iii\\_1](https://www.icrc.org/casebook/doc/book-chapter/fundamentals-ihl-book-chapter.htm#b_iii_1)
- [90] See P I, Art. 49(1): " 1. "Attacks" means acts of violence against the adversary, whether in offence or in defence."
- [91] The issue of "neutralization", but this time of targets, is also discussed in relation to the definition of "attacks" under IHL.
- [92] See P I, Art. 52(2): "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."
- [93] See P I, Art. 51(5)(b)
- [94] See Tallinn Manual on the International Law Applicable to Cyber Warfare, 2009, Rule 51
- [95] See P I, Art. 58
- [96] Tallinn Manual on the International Law Applicable to Cyber Warfare, 2009