CHAPTER 9 MEANS AND METHODS OF WARFARE

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The present chapter summarily fleshes out the substantive implications of what AP I labels, in Article 35, one of the basic rules when it comes to "means and methods of warfare": "In any armed conflict, the right of the Parties to the conflict to choose methods or means of warfare is not unlimited".¹

Section 1 of the present chapter deals with the basic principles underpinning the legal framework applicable to "means of warfare", whereas section 2 deals with a number of "methods of warfare". While neither concept is authoritatively defined in treaty law, there is consensus that the concept of "means" of warfare refers to weapons, as well as weapons launch and delivery systems.² By contrast, the concept of "methods" of warfare, generally refers to particular tactics resorted to in warfare, including the modalities according to which a belligerent party employs the weapons at its disposal.³

Historically, this part of the law of armed conflict squarely belongs to the so-called "law of the Hague", i.e. rules regulating military operations among combatants, and proscribing how combatants are entitled to conduct hostilities. In short: how does the law of armed conflict conceive of a lawful fight between the parties to the conflict?

^{*} The views expressed in this article are strictly personal to the authors. The usual disclaimers apply.

¹ Protocol Additional to the Geneva Conventions of 12 August 1949 and relating to the Protection of Victims of International Armed Conflicts of 8 June 1977 (hereinafter AP I) (Compendium 121).

² See: K. HULME, "Weapons", in N.D. WHITE and C. HENDERSON (eds.), Research Handbook on International Conflict and Security Law, Cheltenham, Edward Elgar, 2013, 315–341, 319 (with references). Consider also: NWP 1–14 M, Chapter 9 (referring to "Conventional weapons and weapons systems"); W.H. BOOTHBY, Weapons and the Law of Armed Conflict, Oxford, OUP, 2009, 4 ("The phrase 'means of warfare' means, for the purposes of this book, all weapons, weapons platforms, and associated equipment used directly to deliver force during hostilities" (emphasis added)). The present chapter only deals with the narrower category of "weapons".

³ Y. SANDOZ, C. ŚWINARSKI and B. ZIMMERMAN (eds.), *International Committee of the Red Cross Commentary on the Additional Protocols of 8 June, 1977, to the Geneva Conventions*, Geneva, Martinus Nijhoff, 1987, 621.

1. MEANS OF WARFARE

The present section is divided in three parts. First, attention is devoted towards an assessment of the cardinal principle underpinning the law in this area, i.e. the prohibition of using weapons designed, or of a nature to cause, so-called superfluous injury or unnecessary suffering. In the second part, reference is made to those treaty provisions that seek to explicitly outlaw particular types of weapons altogether. Finally, in the third part, we look at the effect on the legality of weapons of other applicable rules, in particular those belonging to the realm of proscriptions pertaining to the conduct of hostilities.

1.1. SUPERFLUOUS INJURY OR UNNECESSARY SUFFERING

The principle of superfluous injury or unnecessary suffering is one principle that is, at the conceptual level, more than firmly established in the law of armed conflict. Dating back to the 1868 St. Petersburg Declaration, its most recent authoritative formulation can be found in Article 35(2) AP I, which proclaims that "[i]t is prohibited to employ weapons, projectiles and material and methods of warfare of a nature to cause superfluous injury or unnecessary suffering". In 1996, the International Court of Justice identified this as a norm of customary international law, while also recognising it as "one of the cardinal principles of international humanitarian law" (together with the rules concerning distinction).⁴

Before proceeding any further, it is important to keep in mind that the mere fact that a weapon has been explicitly addressed (restricted or prohibited) in a treaty, does not automatically mean that the weapon in question would equally be prohibited on the basis of Article 35(2) AP I: the assessment as to whether a particular weapon qualifies as being "of a nature to cause superfluous injury or unnecessary suffering", is a separate one.⁵ The phrase is conventionally explained as entailing that suffering will be considered unnecessary when no military necessity can be expected from a certain action, as well as in situations where the suffering is clearly excessive in relation to the military advantage to be expected from resorting to the weapon in question.⁶

⁴ ICJ, Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 8 July 1996, ICJ Rep. 1996, §§78–79 (Compendium 913). J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), Customary International Humanitarian Law, 2nd ed., Cambridge, CUP, 2005, Rule 70 at 237 ("The use of means and methods of warfare which are of a nature to cause superfluous injury or unnecessary suffering is prohibited").

⁵ W.H. BOOTHBY, *supra* note 2, 60.

⁶ See, e.g., G.D. SOLIS, *The law of armed conflict*, Cambridge, CUP, 2010, 270–271; S. OETER, "Methods and Means of Combat", in D. FLECK (ed.), *The Handbook of International*

It follows from the foregoing that the application of the principle presupposes some form of comparison, or a "balancing" test ("in relation to"). Some even speak about "proportionality" in this context,⁷ yet one must of course be cautious not to confuse the prohibition of unnecessary suffering, intended to restrain the suffering inflicted on opposing *combatants*, with the principle of proportionality, as understood in the law of targeting (see *infra*), which relates to harm to *civilians*.⁸

For purposes of the balancing test, two factors seem decisive. The first concerns the availability of alternative means or methods which would cause less harm while leading to similar military gains. This reflects the interpretation of the ICJ which associated unnecessary suffering with the occurrence of harm "greater than that *unavoidable* to achieve legitimate military objectives".⁹ The second factor concerns the degree of suffering to be expected from the use of a particular weapon. The problem here is that it is often difficult to quantify suffering in medical terms.¹⁰ In the reading of those arguing in favour of a balancing / proportionality test, injuries can only be superfluous either if they are not justified by any requirement of military necessity, or if the injuries normally caused by the weapon or projectile are manifestly disproportionate to the military advantage that can reasonably be expected from the use of the weapon.¹¹

No matter how difficult (even: impossible) it may be to "scientifically" quantify the precise operational implications of this rule, one thing is clear: two pillars underpin the prohibition to employ weapons of a nature to cause superfluous injury or unnecessary suffering, namely the core principles of humanity and military necessity. The former has been argued to mean that capture is preferable to wounding an enemy and wounding him better than killing him; that wounds inflicted should be as light as possible and that wounds

Humanitarian Law, 3rd ed., Oxford, OUP, 2013, 125–126 (referring to "the use of weapons and methods of combat whose foreseeable harm would be clearly excessive in relation to the lawful military advantage intended"); Y. DINSTEIN, *The conduct of hostilities under the law of international armed conflict*, 2nd ed., Cambridge, CUP, 2010, 64; B.M. CARNAHAN, "Unnecessary suffering, the Red Cross and tactical laser weapons", 18 Loy. L.A. Int'l & Comp. L. Rev. 1995–96, 713; J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 240.

⁷ E.g., M. BOTHE, K.J. PARTSCH, W.A. SOLF and M. EATON, New rules for victims of armed conflicts: commentary on the two 1977 protocols additional to the Geneva Conventions of 1949, The Hague, Martinus Nijhoff, 1982, 196. Compare: Y. DINSTEIN, supra note, 65.

⁸ G.D. SOLIS, *supra* note 6, 270.

⁹ ICJ, Legality of the Threat or Use of Nuclear Weapons, supra note 4, \$78 (emphasis added).

¹⁰ In the 1990s, the ICRC set up the so-called SIrUS project with a view to developing objective standards to assess (unnecessary) suffering. The project was, however, withdrawn prematurely in 2001. Further: R.M. COUPLAND and P. HERBY, "Review of the legality of weapons: a new approach: the SIrUS Project", 81 *Int'l Rev. Red Cross* 1999, 583–592; D.M. VERCHIO, "Just say no! The SIrUS project: well intentioned, but unnecessary and superfluous" 51 *Air Force L. Rev.* 2001, 183.

¹¹ S. OETER, *supra* note 6, 125.

should cause the least possible pain.¹² The law of armed conflict, however, inherently takes into account the requirement of military necessity, and it is only in the dialectical interrelationship between both core principles that the true thrust of these rules can be fully understood. Military necessity, indeed, permits a party to a conflict to use only that degree and that kind of force, not otherwise prohibited by the law of armed conflict, as is required to achieve the legitimate purpose of the armed conflict, namely the complete or partial submission of the enemy at the earliest possible moment with the minimum expenditure of life and resources.¹³ One will find varying accounts regarding the precise boundaries of the law in this area of study depending upon which side of the "humanitarian-principles-versus-military-necessity equilibrium" a particular reading is situated.

Although quite a number of scholars¹⁴ agree that the concept of **unnecessary suffering** may require a careful balance to be struck between the competing principles of humanity and military necessity, views differ as to the relevant criteria used to determine whether the prohibition has been violated. Two factors that figure *inter alia* in the ICRC customary study are the tendency of a weapon to render death inevitable or to result in permanent disability.¹⁵

In all, despite its well-established customary nature, it must be acknowledged that little practical operational guidance can be deduced from this prohibition. The true gist of the rule, in specific terms, can however be found in numerous treaties that have been adopted where, for specific weapons, this prohibition clearly was the underlying factor motivating States to agree to an outright prohibition of a particular weapon. Examples thereof can be found in the 1925 Geneva Gas Protocol. While, as previously indicated, no particular prohibition in treaty law would automatically qualify under this customary prohibition, several treaties explicitly refer to the principle as one of its underlying motivations.¹⁶

The implication of the phraseology must, therefore, be clearly understood, and this in light of the general trade-off inherent in any rule of the law of armed conflict, i.e. the mere fact that a certain weapon causes considerable suffering does not in itself make it an unlawful weapon *per se*. It is, at the current juncture,

J. PICTET, Le droit humanitaire et la protection des victimes de la guerre, Leiden, Sijthoff, 1973, 34.

¹³ UK MINISTRY OF DEFENCE, *The Manual of the Law of Armed Conflict*, Oxford, OUP, 2004, 21–22.

¹⁴ See supra note 6. This view is equally propounded in the J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), supra note 4, 240–241.

¹⁵ J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 241. But see e.g., Y. DINSTEIN, *supra* note 6, 65 (warning against confusing the lethal character of a weapon with the question concerning unnecessary suffering).

¹⁶ See e.g., the preamble of the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons which may be Deemed to be Excessively Injurious or to have Indiscriminate Effects of 10 October 1980 (*Compendium* 399).

that the pendulum of the assessment may swing and that requirements of *military necessity* will play a key role in determining the illegality – on the basis of this general rule – of any particular weapon.¹⁷ In practice, States are generally reluctant to accept the idea that a weapon would be unlawful purely on the basis of this prohibition, implying that one needs a separate treaty rule to that effect.¹⁸ This observation may be disappointing to those who are new to the study of the law of armed conflict. Yet, in order to properly understand and appreciate the latter's intricacies, it must be kept in mind that this legal framework reflects, and is limited by, States' perception of their own interests and is not determined by individual citizens wishing to outlaw armed conflict altogether.¹⁹

Divergence of opinion exists as to whether the prohibition of fielding weapons designed, or of a nature, to cause superfluous injury or unnecessary suffering merely serves as a guiding principle for the conclusion of specific weapons treaties, or whether it has any autonomous value – in other words: whether the rule of Article 35(2) AP I is in itself sufficient, absent specific treaty law, to render the use of a particular weapon illegal.²⁰

The divergence of opinion is reflected in Article 8(2)(b)(xx) ICC Statute, which lists as a war crime the employment of means or methods of warfare "which are of a nature to cause superfluous injury or unnecessary suffering [...] *provided that* such weapons, projectiles and material and methods of warfare are the subject of a comprehensive prohibition and are included in an annex to [the] Statute".²¹ To date, such an annex listing specific weapons does not exist, hence leaving this provision impossible to apply. Conversely, the ICC Statute subjects only the use of a limited number of weapons to possible individual criminal liability and, in the initial version at least, then only in the case of international armed conflicts.²²

¹⁷ Y. DINSTEIN, *The conduct of hostilities under the law of international armed conflict*, 1st ed., Cambridge, CUP, 2004, 59: "A weapon is proscribed only if it causes injury or suffering that can be avoided, given the military constraints of the situation". For a detailed discussion of the principle, see W.H. BOOTHBY, *supra* note 2, 55–68.

¹⁸ Cfr. also the discussion in J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), supra note 4, 242–243: "[...] views differ as to whether the rule itself renders a weapon illegal or whether a weapon is illegal only if a specific treaty or customary rule prohibits its use".

¹⁹ F. KALSHOVEN, "Arms, Armaments and International Law", 191 *Recueil des Cours* 183 (1985-II), 288.

²⁰ See J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 242; Y. DINSTEIN, *supra* note 6, 67.

Art. 8(2)(b)(xx) Rome Statute of the International Criminal Court, 17 July 1998, UN Doc. A/ CONF.183/9 (hereinafter ICC Statute) (*Compendium* 580) (emphasis added).

Art. 8(b)(xvii); (xviii) and (xix) of the ICC Statute, respectively related to "employing poison or poisoned weapons"; "employing asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices"; and "employing bullets which expand or flatten easily in the human body, such as bullets with a hard envelope which does not entirely cover the core or is pierced with incisions". At the 2010 Review Conference, an amendment (not further discussed here) was adopted with a view to making some of these war crimes equally applicable in non-international armed conflicts.

The better view seems to be that while the principle of unnecessary suffering cannot render a particular weapon illegal *per se*, it does provide a framework to assess the legality of its use in a particular situation. This reasoning conforms to the ICJ's approach in the *Nuclear Weapons* Advisory Opinion. It is also supported by the fact that the ICTY Statute identifies the employment of weapons calculated to cause unnecessary suffering as a violation of the laws or customs of war.

Finally, as States are often unwilling to discard newly developed weapons in which they have invested great amounts of time and money, AP I also provides for a more proactive obligation in Article 36 AP I. The latter Article proclaims that States studying, developing or acquiring a new "weapon, means or method of warfare" are under the obligation "to determine whether its employment would, in some or all circumstances, be prohibited" by AP I or by any other applicable rule of international law (such as the prohibition regarding unnecessary suffering). This obligation is to be implemented at the national level of each individual State, i.e. no multilateral mechanism exists in this regard. Only a few States²³ have actually developed procedures in order to operationalise this provision at the domestic level²⁴ and ostensibly conduct Article 36 reviews behind closed doors. If properly implemented, Article 36(2) AP I should make a valuable contribution to the goal of eradicating unlawful means and methods of warfare, especially since - arguably - the determination under Article 36 AP I should not be conducted in the abstract, but be of a contextual nature.²⁵ To this end, the ICRC has developed an informal, non-binding guidance document setting out its views as to how to interpret and operationalise this provision.²⁶

Having dealt with the basic principle underpinning the law of armed conflict pertaining to weaponry, the next two parts of this section seek to provide further clarity as to the way in which States have agreed to regulate this subject from the angle of the law of armed conflict.²⁷ Here, it is important to keep in mind a two-step approach: first, there are a limited number of weapons which have explicitly been outlawed (section 1.2). The fact that most weapons have not been subject

²³ For a list of countries concerned (dating from 2006), see ICRC, "A Guide to the Legal Review of New Weapons, Means and Methods of Warfare: Measures to Implement Article 36 of Additional Protocol I of 1997", 88 *Int'l Rev. Red Cross* 2006, 931, footnote 8.

²⁴ For further background on AP I, Art. 36, see I. DAOUST, R. COUPLAND and R. ISHOEY, "New Wars, New Weapons? The obligation of States to assess the legality of means and methods of warfare", 84 Int'l Rev. Red Cross 2002, 397; J. McCLELLAND, "The Review of Weapons in Accordance with Article 36 of Additional Protocol I", 85 Int'l Rev. Red Cross 2003, 397. See also W.H. BOOTHBY, supra note 2, 340–352; A. BACKSTROM and I. HENDERSON, "New capabilities in warfare: an overview of contemporary technological developments and the associated legal and engineering issues in Article 36 Weapons Reviews", 94 Int'l Rev. Red Cross 2012, 483–514.

²⁵ J.D. FRY, "Contextualized Legal Reviews for the Methods and Means of Warfare: Cave Combat and International Humanitarian Law", 44 Colum. J. Transnat'l L. 2006, 453.

²⁶ For the full text thereof, see ICRC, *supra* note 23, 931.

²⁷ This contribution does not deal at all with matters of arms control and non-proliferation.

to such an explicit, outright prohibition does not necessarily mean that they are lawful, however. Paragraph 3 deals with this second step in the analysis. Clearly, the law of weaponry is a particularly sensitive subject for many States.²⁸

1.2. EXPLICITLY PROHIBITED WEAPONS

Given the number of treaties in this area, it is beyond the ambition of this contribution to provide an exhaustive overview as to all types of weapons that have been subjected to a specific and explicit prohibition. As always in law, one needs to be very careful in interpreting these treaties. Every single time, the actual scope of application of the treaty will entirely depend on the way in which the weapon in question has been defined. It thus becomes important to inquire in respect of which weapons specifically States have consented that it can no longer be used.

Historically, among the oldest examples that can be cited in this area is the prohibition on the use of poison and poisoned weapons (Article 23(a) of the Regulations respecting the laws and customs of war on land, annexed to Hague Convention IV (1907) (hereafter: the Hague Regulations)²⁹, as well as the prohibition of particular types of explosive bullets (contained in the 1868 St. Petersburg Declaration³⁰), and the prohibition of bullets that expand or flatten easily in the human body (see Article 3 of the 1899 Hague Declaration IV concerning Expanding Bullets).³¹

As to non-conventional weapons, the thrust of the rules relating to biological weapons is nowadays found in the 1972 Biological Weapons Convention.³² This

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²⁸ For an explanation, see W. HAYS PARKS, "Means and Methods of Warfare", 38 Geo. Wash. Int'l L. Rev. 2006, 501.

²⁹ For a discussion on the precise meaning of the terms "poison and poisoned weapons", see J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 251–254.

³⁰ Sixth paragraph: "The Contracting Parties engage mutually to renounce, in case of war among themselves, the employment by their military or naval troops of any projectile of a weight below 400 grammes, which is either explosive or charged with fulminating or inflammable substances". Further: T. Ruys, "The XM25 Individual Airburst Weapon System: A 'Game Changer' for the (Law on the) Battlefield? Revisiting the Legality of Explosive Projectiles under the Law of Armed Conflict", 45 *Israel L. Rev.* 2012, 401–430.

³¹ These are commonly referred to as "dum dum" bullets: see Declaration IV, Concerning Expanding Bullets, the first operative paragraph of which reads: "The contracting Parties agree to abstain from the use of bullets which expand or flatten easily in the human body, such as bullets with a hard envelope which does not entire cover the core or is pierced with incisions" (1907 UKTS No. 32). Further: A. VANHEUSDEN, W. HAYS PARKS and W.H. BOOTHBY, "The use of expanding bullets in military operations: examining the Kampala consensus", 50 Rev. Dr. Mil. & Dr. Guerre 2011, 535–556.

³² Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction of 10 April 1972 (*Compendium* 385). Further: J. GOLDBLAT, "The Biological Weapons Convention – An Overview", 318 Int'l Rev. Red Cross 1997, 251.

Convention builds on the 1925 prohibition on asphyxiating gases³³ – which was already at the time understood to equally cover "bacteriological methods of warfare". Regarding the activities it covers, the 1972 Convention goes much beyond the scope of the 1925 prohibition, which only related to the use of such gases, by additionally including matters of development, production, stockpiling or "otherwise acquir[ing] or retain[ing] these weapons" (Article 1).

As for chemical weapons, the 1993 Chemical Weapons Convention is obviously the basic reference document.³⁴ The Convention contains a very comprehensive overview of the type of activities that are prohibited, in addition to a prohibition pertaining to their "use". Moreover, an elaborate and detailed regime geared towards their destruction, under international oversight by the Organisation for the Prohibition of Chemical Weapons, an intergovernmental organisation based in The Hague, is included within the agreement. Article 1(5) of the Chemical Weapons Convention prohibits the "use of riot control agents as a method of warfare", once the threshold of the law of armed conflict has been crossed. Below that threshold, however, their use (such as for example tear gas) may be lawful, i.e. as a matter of law enforcement to disperse a rioting crowd.³⁵ Although the prohibition on the use of chemical weapons as a method of warfare now forms part of customary international law,³⁶ chemical agents have occasionally been used in armed conflict both before and after 1993. During the Iraq-Iran wars in the 1980s, Iraq used chemical weapons on a large scale; more recently, chemical weapons have been used in the context of the Syrian civil war.³⁷

The landscape of treaties restricting or prohibiting specific weapons is much broader than those dealt with so far. Most prominently, a series of specific treaties prohibiting particular weapons has been adopted under the framework of the umbrella agreement of the 1980 Convention on the Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which may be Deemed to be

³³ Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare of 17 June 1925 (*Compendium* 381). Further: J.N. MOORE, "Ratification of the Geneva Protocol on Gas and Bacteriological Warfare: A Legal and Political Analysis", 58 Virginia L. Rev. 1972, 419–509.

Further: W. KRUTSCH, E.P.J. MYJER and R. TRAPP (eds.), *The Chemical Weapons Convention:* a commentary, Oxford, OUP, 2014, 728; M. BOTHE (ed.), *The New Chemical Weapons* Convention: implementation and prospects, The Hague, Kluwer Law International, 1998, 613.
 For a further discussion acc W H. POOTUPA curves pate 2, 125, 126

³⁵ For a further discussion, see W.H. BOOTHBY, *supra* note 2, 135–136.

³⁶ J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 259.

³⁷ In particular, an attack with chemical weapons near Damascus in August 2013 resulting in several hundreds of civilian casualties led to widespread international indignation and even calls for a military intervention against the Syrian regime. Eventually, however, following a Russian diplomatic initiative, threats of military intervention were averted after the Syrian regime agreed to join the CWC and have its chemical weapons stockpiles destroyed under OPCW supervision. "Framework for Elimination of Syrian Chemical Weapons", 14 September 2013, annexed to OPCW Doc. EC-M-33/NAT.1, available at www.opcw.org/fileadmin/OPCW/EC/M-33/ecm33nat01_e_.pdf [accessed on 16 July 2015]; UNSC Resolution 2118 of 27 September 2013, UN Doc. S/RES/2118. Further: T. RUYS and N. VERLINDEN, "Digest of State Practice – 1 July-31 December 2013", 1 J. Use of Force & Int'l L. 2014, 172–180.

Excessively Injurious or to Have Indiscriminate Effects.³⁸ Under this framework agreement, a series of "protocols" have subsequently been adopted separately, notably related to non-detectable fragments³⁹; the use of mines, booby-traps and other devices⁴⁰; the use of incendiary weapons⁴¹; blinding laser weapons,⁴² and explosive remnants of war.⁴³ As previously indicated, for each of these instruments, it is crucial to carefully assess the way the weapon concerned is defined. It is this definition, indeed, which determines each document's precise scope of applicability. Negotiations have been ongoing within the CCW framework for several years on the possible conclusion of further instruments dealing specifically with "mines other than anti-personnel mines", or with lethal autonomous weapons.⁴⁴

Another prominent example of a treaty prohibiting particular types of weapons is the 1997 Ottawa Convention on Anti-Personnel Mines,⁴⁵ which contains a very comprehensive set of prohibitions (Article 1 Ottawa Convention) related to a variety of activities States can no longer undertake in relation to these mines.⁴⁶ This Convention is a prominent example which demonstrates the importance of clearly understanding the definition agreed upon in the text. Article 2(1) Ottawa Convention defines the concept "anti-personnel mine" in a very precise manner, the crucial term of the definition being "designed to", which does exclude a number of mines from being covered by this definition.⁴⁷ Apart from imposing a general ban on the use of anti-personnel mines

³⁸ CCW, *supra* note 16.

³⁹ Protocol I on Non-Detectable Fragments of 10 October 1980 (*Compendium* 402): "It is prohibited to use any weapon the primary effect of which is to injure by fragments which in the human body escape detection by X-rays".

⁴⁰ Protocol II on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices of 10 October 1980, amended in 1996 (*Compendium* 402). Further: M.J. MATHESON, "The revision of the Mines Protocol", 91 Am. J. Int'l L. 1997, 158–167.

⁴¹ Protocol III on Prohibitions or Restrictions on the Use of Incendiary Weapons of 10 October 1980 (*Compendium* 409). Further: W. HAYS PARKS, "The Protocol on Incendiary Weapons", 279 Int'l Rev. Red Cross 1990, 535–550.

⁴² Protocol IV on Blinding Laser Weapons of 13 October 1995 (*Compendium* 410). Further: L. DOSWALD-BECK, "New Protocol on Blinding Laser Weapons", 36 Int'l Rev. Red Cross 1996, 272–299.

⁴³ Protocol V on Explosive Remnants of War of 28 November 2003 (*Compendium* 410). Further: L. MARESCA, "A new Protocol on Explosive Remnants of War: the history and negotiation of Protocol V to the 1980 Convention on Certain Conventional Weapons", 856 *Int'l Rev. Red Cross* 2004, 815–835.

⁴⁴ For the latest information on these negotiations, see the CCW website: www.unog. ch/80256EE600585943/(httpPages)/4F0DEF093B4860B4C1257180004B1B30?OpenDocum ent [accessed on 16 July 2015].

⁴⁵ Full title is the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on Their Destruction of 18 September 1997 (Compendium 450). Further: S. MALSEN, Commentaries on Arms Control Treaties Vol. 1, The Convention on the prohibition of the use, stockpiling, production, and transfer of anti-personnel mines and on their destruction, 2nd ed., Oxford, OUP, 2005, 706.

⁴⁶ For a detailed analysis, see W.H. BOOTHBY, *supra* note 2, 181–192.

⁴⁷ *Ibid.*, 185–186.

(Article 1), the Convention also contains sweeping obligations on the destruction of existing stockpiles of anti-personnel mines and on the destruction of such mines in mined areas (Articles 4–5). Despite 162 States having signed up to the Convention, several important players, including China, Russia and the United States, have so far refused to join. In 2014, the United States nonetheless decided to "align" its policy to the key requirements under the Ottawa Convention, *inter alia* by announcing that it would no longer use anti-personnel mines outside the Korean Peninsula.⁴⁸

Pursuant to an international advocacy campaign, stemming from both civil society and a number of States, the international community concluded a treaty on the prohibition of cluster munitions in 2008,⁴⁹ inspired by observations from certain armed conflicts in the years preceding those efforts. While the treaty entered into force in 2010, it must be pointed out that a number of militarily important States (including Israel and the United States) rather strongly oppose this text.

Finally, as far as nuclear weapons are concerned – a topic going far beyond the confines of the present article – within international law and policy these have traditionally mostly been dealt with from a non-proliferation, arms control and disarmament angle.⁵⁰ The treatment of nuclear weapons at the international level, regarding their regulation under the law of armed conflict, however, has traditionally been much thinner. Slowly, this has started to change in that, since 2013, certain States have started to approach the discussion on the topic of nuclear weapons also from the angle of their humanitarian impact. Be that as it may, so far at least, contrary to what is the case for biological and chemical weapons, there is no treaty regulating the *use* of nuclear weapons. Quite a number of States – and it must be noted that these were not only States with nuclear weapons capabilities – made statements upon ratifying AP I in order to indicate that it was their view that AP I only addressed conventional weapons.

⁴⁸ United States White House, Office of the Press Secretary, "Fact Sheet: changes to U.S. antipersonnel landmine policy", 23 September 2014, available at www.whitehouse.gov/the-pressoffice/2014/09/23/fact-sheet-changes-us-anti-personnel-landmine-policy [accessed on 16 July 2015].

⁴⁹ Convention on Cluster Munitions of 30 May 2008 (Compendium 466). Further: G. NYSTUEN and S. CASEY-MASLEN (eds.), The Convention on Cluster Munitions: a commentary, Oxford, OUP, 2010, 864.

⁵⁰ Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968 (Compendium 382). Further: D.H. JOYNER, Interpreting the nuclear non-proliferation treaty, Oxford, OUP, 2011, 184; G. NYSTUEN, S. CASEY-MASLEN and A. GOLDEN BERSAGEL (eds.), Nuclear Weapons under international law, Cambridge, CUP, 2014, 503.

⁵¹ See for example the statement made by the United Kingdom upon ratification of AP I: "It continues to be the understanding of the United Kingdom that the rules introduced by the Protocol apply exclusively to conventional weapons without prejudice to any other rules of international law applicable to other types of weapons. In particular the rules so introduced do not have any effect on and do not regulate or prohibit the use of nuclear weapons".

In the words of Frits Kalshoven, the situation can be aptly summarised as

The sobering conclusion must be that the wartime use of nuclear weapons is not categorically prohibited under the existing rules of positive international law. Yet to be lawful any such use must respect certain principles on the protection of the civilian population from the effects of hostilities.⁵²

Thus, while nothing in AP I explicitly addresses, let alone prohibits, the use of nuclear weapons, their use will always be subject to the general rules and principles of the law of armed conflict, such as – among others – the principle of distinction and the principle of proportionality (for a discussion thereof, see *infra* and Chapter 7 of this volume). This view was affirmed by the ICJ in its 1996 Advisory Opinion on *Nuclear Weapons*.⁵³ Thus, despite the absence of a convention specifically dealing with their use in the course of an armed conflict, States – including those with nuclear weapons capabilities – do not deny that the use of nuclear weapons is fully subject to the rules of the law of armed conflict.

While acknowledging that, in most instances, the use of nuclear weapons will be indiscriminate (for the meaning of this notion, see the next paragraph), the Court has neither excluded, nor explicitly recognised that the use of particular types of nuclear weapons (such as particular species of so-called tactical nuclear weapons) *may* be lawful in particular circumstances. Ultimately, the Court could not bring itself to conclude that public international law would contain an outright categorical prohibition. Irrespective of the aspects of the Advisory Opinion which exclusively deal with *jus in bello* considerations, it is particularly regrettable that the Court has leapt towards the confusion of *jus ad bellum* and *jus in bello*,⁵⁴ thereby – quite surprisingly – itself violating one of the basic tenets of international security law, i.e. the strict separation of *jus ad bellum* versus *jus in bello*.

The preceding paragraphs have merely offered a cursory and incomplete overview of the existing treaties which contain a prohibition of particular types

follows:

⁵² F. KALSHOVEN, *supra* note 19, 287.

⁵³ ICJ, Legality of the Threat or Use of Nuclear Weapons, supra note 4, \$226, with at \$256: "The Court not having found a conventional rule of general scope, nor a customary rule specifically proscribing the threat or use of nuclear weapons per se, it will now deal with the question whether recourse to nuclear weapons must be considered as illegal in the light of the principles and rules of international humanitarian law applicable in armed conflict and the law of neutrality" and at \$259: "[...] it cannot be concluded [...] that the established principles and rules of humanitarian law applicable in armed conflict (do) not apply to nuclear weapons".

⁵⁴ Ibid., \$263: "[...] the Court is led to observe that it cannot reach a definite conclusion as to the legality or illegality of the use of nuclear weapons by a State in an extreme circumstance of self-defence, in which its very survival would be at stake". In the dispositif of the Advisory Opinion (at 266) this has been slightly reworded. For a good analysis, see Y. DINSTEIN, *supra* note 6, 83–86, as well as W.H. BOOTHBY, *supra* note 2, 215–223.

of weapons. As is explained in the following section, however, the mere fact that a particular weapon has not been specifically and explicitly outlawed, does not mean that its use is necessarily always lawful in armed conflict.

1.3. WEAPONS THE USE OF WHICH MAY BE UNLAWFUL

As previously stated, it must be clearly understood that the mere fact that no explicit prohibition has been adopted in regard of a particular weapon does not necessarily or automatically mean that its use would always be lawful. The rules under the law of armed conflict relating to attacks have direct implications for the legality of particular types of weapons. Most prominently in this regard is a rule which directly flows (yet which is separate and to be distinguished) from, and further operationalises, the quintessential principle of distinction, i.e. the rule prohibiting so-called indiscriminate attacks.⁵⁵

The notion of "indiscriminate attacks" – explicitly prohibited as per this provision – is defined in Article 51(4) AP I, which is worth quoting in full:

Indiscriminate attacks are: (a) those which are not directed at a specific military objective; (b) those which employ a method or means of combat which cannot be directed at a specific military objective; or (c) those which employ a method or means of combat the effects of which cannot be limited as required by this Protocol; and consequently, in each such case, are of a nature to strike military objectives and civilians or civilian objects without distinction.

While (a) is not directly relevant from the angle of the law of weaponry, the same cannot be said for (b) and (c). In essence, these provisions boil down to the requirement that a belligerent party needs to be able to control the effects of the weapons it uses in the course of an armed conflict, i.e. every weapon needs to be *capable* of complying with the principle of distinction between civilians and civilian objects, on the one hand, versus combatants and military objectives, on the other hand.

An attack using a weapon is indiscriminate when the attacker, while not seeking to directly target civilians (in which case the attack violates the principle of distinction and may even qualify as a war crime on that basis), does not care whether his attack hits civilians.⁵⁶ The choice of a particular weapon, i.e. one unable to be of a discriminate nature, may be indicative in this regard. At its most basic level, this means that any weapon has to be able to be controlled by the belligerent party employing it: the belligerent party has to be able to clearly

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⁵⁵ Further: A. CASSESE, "The prohibition of indiscriminate means of warfare", in R.J. AKKERMAN (ed.), Declarations on principles. A quest for universal peace. Liber amicorum discipluromque Prof. Dr. Bert V.A. Röling, Leiden, Springer, 1977, 171–194.

⁵⁶ Y. DINSTEIN, *supra* note 6, 127.

direct the weapon to a military objective, and has to be able to distinguish between military objectives and civilian objects. Without making any statements as to the lawfulness of intercontinental ballistic missiles in general, it cannot be excluded that some of these missiles do not allow for the attack to clearly direct where the missile will hit the ground. Provided all other conditions of the definition as to what constitutes an "indiscriminate attack" have been fulfilled, the use of such missiles may, in these circumstances, be prohibited under AP I. Definitely prohibited will be unguided missiles which cannot be directed at all, i.e. in respect of which the attacker has no clue, nor control over the factor, as to where it will strike.

It is important in this regard to keep in mind the difference between weapons that will always, in and of themselves, be in violation of the principle of distinction (e.g., biological weapons, which are in any case prohibited under the Biological Weapons Convention and customary international law), and weapons that can be used discriminately, but the use of which will be considered indiscriminate in a particular context. Article 51(5) AP I itself provides two non-exhaustive examples of what are to be considered indiscriminate attacks, one of which codifies the principle of proportionality, i.e. the prohibition of conducting an attack "which 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" (Article 51(5)(b) AP I). Of course, the latter rule has no direct bearing on the legality of weapons and the principle of proportionality drastically transcends the topic of weapons. Yet, it must be kept in mind that some weapons are known to have dramatic reverberating effects beyond their direct kinetic impact. In such case, they may be unlawful as per a violation of the principle of proportionality, which is dealt with below.

2. METHODS OF WARFARE

Though often mentioned in the same sentence, "methods of warfare" are different from "means of warfare". As mentioned above, while neither term is authoritatively defined at the level of treaty law (see *supra*), they mean different things. "Means" of warfare refers to weapons, as well as weapons launch and delivery systems. "Methods" of warfare, by contrast, refers to tactics, such as starvation, or the way in which weapons are used.

2.1. THE BASIC RULES OF ATTACKS

The purpose of this part is to set out the basic rules pertaining to the (un) lawfulness of attacks. Clearly, this is a vast subject the importance of which cannot be overstated. Not all rules can be addressed in their detailed intricacies,

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let alone controversies pertaining to the margins of their contours. Yet, the interesting feature of the law of armed conflict on this subject resides exactly in the fact that these basic rules are relatively easy to understand for everyone, which obviously is a factor of huge importance in real-life terms: the viability of the law of armed conflicts depends upon the existence of clear norms that are accessible, understandable and also plausible for all combatants, including those at the lower levels of the military hierarchy.

Reduced to its essence, the law of armed conflict pertaining to the conduct of hostilities hinges upon the principle of distinction "between the civilian population and combatants and between civilian objects and military objectives" (Article 48 AP I), proscribing that "operations" may only be directed against military objectives (see *supra* Chapter 7 of this volume).

In order to properly understand the rules on targeting, one needs to clearly differentiate (as does the law) between "military operations" and the more limited category of "attacks". While the first notion is not defined in treaty law, the concept of "attack" is described in Article 49 AP I as meaning "acts of violence against the adversary, whether in offence or in defence". Thus, the crucial threshold question, as to whether a particular military operation qualifies as an "attack", relates to whether it involves "acts of violence". Quite a number of military operations, as resorted to by the armed forces in the course of an armed conflict, do not reach this threshold. Espionage or other forms of intelligence gathering which do not involve any act of violence are primary examples. Hence, they are not covered by those rules of AP I whose application hinges upon the existence of an "attack". Similarly, since propaganda does not involve any "act of violence", it does not qualify as an "attack". The notion of "attack" as used in the law of armed conflict needs to be kept sharply separate from the notion of "armed attack", belonging to jus ad bellum and found in Article 51 UN Charter.57

Undoubtedly qualifying as one of the law of armed conflict's most important rules, Article 52(1) AP I states that "[c]ivilian objects shall not be the object of attacks or of reprisals"; Article 52(2) AP I in turn provides that "[a]ttacks shall be limited strictly to military objectives". The latter provision also contains a definition of what constitutes a "military objective".

Based upon this conceptual framework, the law regulating attacks is straightforward.⁵⁸ First and foremost, one needs to assess whether or not the

⁵⁷ Charter of the United Nations, 26 June 1945 (Compendium 1). On the jus ad bellum understanding of "armed attack", see, for instance: O. CORTEN, Le droit contre la guerre, 2nd ed., Paris, Pedone, 2014, 657 et seq.; A. RANDELZHOFER and G. NOLTE, "Article 51" in B. SIMMA et al. (eds.), The Charter of the United Nations. A Commentary Vol. II, 3rd ed., Oxford, OUP, 2012, 1397–1444, §§16 et seq.; T. RUYS, 'Armed attack' and Article 51 of the UN Charter, Cambridge, CUP, 2010, 585.

For a very detailed analysis, upon which this paragraph is directly based, see M.N. SCHMITT, "Fault Lines in the Law of Attack", in S. BREAU and A. JACHEC-NEALE (eds.), *Testing the*

target is a lawful one, i.e. whether it qualifies as a military objective. Also lawful to be directly attacked are combatants and civilians taking a direct part in hostilities, albeit that in the case of the latter this holds true only "for such time as they take a direct part in hostilities" (Article 51(3) of AP I). The contours of the latter subject have led to intense debates within the community of IHL Experts⁵⁹ but are not dealt with here. Suffice it to mention for the present purposes that, in addition to military objectives, combatants and civilians taking a direct part in hostilities, for the time of their taking such part, can also be subjected to an attack directed against them. Second, one must assess whether the means and methods of warfare resorted to in order to carry out the attack are lawful under the law of armed conflict. Thirdly, even if all of the previous is the case, one must still assess whether or not the attack violates the principle of proportionality, as defined in Article 51(5)(b) AP I.⁶⁰ Finally, a range of "precautions in attacks" requirements need to be assessed, all of which are designed so as to spare civilians to the extent possible. These so-called precautions in attack⁶¹ are dealt with in Article 57 AP I and contain a variety of requirements compelling an attacker to ensure, through verification, choice of means and methods of attack, etc., that incidental loss of civilian life or damage to civilian objects is "avoid[ed], and in any event [...] minimiz[ed]" (see the yardstick as set out in Article 57(2) AP I). The phraseology pertaining to the interplay between "avoid" and "minimise" is revealing for the law's logic on this topic, in that the law acknowledges that (provided the principle of proportionality is not violated) it may not always be possible to fully spare the civilian population. In that eventuality, and with continued reference to the applicability of the principle of proportionality, the attacker has an obligation that "in any event" such loss of civilian lives and damage to civilian objects is minimised.

Of particular relevance is the requirement contained in Article 57(2)(c) AP I, which provides that "effective advance warning shall be given of attacks which may affect the civilian population, unless circumstances do not permit". This obligation is at times implemented by aerial droppings of leaflets over areas

boundaries of international humanitarian law, London, British Institute of International and Comparative Law, 2006, 277–307, with the summary provided at 277–278. Further: W.H. BOOTHBY, *The Law of Targeting*, Oxford, OUP, 2012, 603; I.S. HENDERSON, *The contemporary law of targeting*, Leiden, Nijhoff, 2009, 266.

⁵⁹ In 2009, the ICRC set out its views on the subject in its Interpretive Guidance on the Notion of Direct Participation in Hostilities under International Humanitarian Law, available at https://www.icrc.org/eng/assets/files/other/icrc-002-0990.pdf [accessed on 16 July 2015]. For a discussion in the academic literature, see e.g., the articles by N. MELZER, M.N. SCHMITT, W. HAYS PARKS, W.H. BOOTHBY and K. WATKIN in 42-3 NYU J. Int'l L. & Pol. 2010.

⁶⁰ Further: E. CANNIZZARO, "Proportionality in the law of armed conflict", in A. CLAPHAM and P. GAETA (eds.), *The Oxford Handbook of International Law in Armed Conflict*, Oxford, OUP, 2014, 332–352.

⁶¹ Further: J.-F. QUÉGUINER, "Precautions under the law governing the conduct of hostilities", 88 Int'l Rev. Red Cross 2006, 793–821.

warning inhabitants of an impending attack⁶² (as Israel did, for instance, in the Gaza Strip in the course of Operation Protective Edge in 2014).⁶³ The very same trade-off is at play here: the requirement to issue an "effective advance warning", indeed, is not an absolute one. In particular, if the whole point of a particular attack is to be a so-called surprise attack, then "circumstances do not permit" and no warning needs to be issued to the civilian population. This, of course, by no means detracts from the continued applicability of all other requirements preconditioning the lawfulness of a particular attack.

2.2. PERFIDY

Prominent among the restrictions on methods of warfare is the prohibition on perfidy. This rule can be traced back to discussions regarding the legality of the assassination of enemy kings during the heydays of the *bellum justum* doctrine. Initially, scholars such as St. Thomas Aquinas and Sir Thomas More expressed support for the idea that the killing of an "evil sovereign" was justified in order to spare the innocent and punish those responsible for wars.⁶⁴ However, from the 16th century onwards, through the writings of Ayala, Gentili, Grotius, Vattel and Kant, a new norm emerged distinguishing between permissible trickery and impermissible "frauds and snares", including putting a price on an enemy's head.⁶⁵ The latter practices were rejected on the grounds that they rendered those pursuing a just cause indistinguishable from the tyrants they fought. Over time, a consensus emerged rejecting the use of treacherous means in combat. This approach was subsequently copied in the various codifications of the laws of war.

Article 23(b) Hague Regulations currently provides that it is "forbidden to kill or wound treacherously individuals belonging to the hostile nation or army".⁶⁶ This prohibition was further reaffirmed and developed by AP I, which replaced the term "treachery" by the broader concept of "perfidy". Article 37(1) AP I reads as follows: "It is prohibited to kill, injure or capture an adversary by

⁶² Further: P. SHARVIT BARUCH and N. NEUMAN, "Warning civilians prior to attack under international law: theory and practice", 87 Naval War College – International Law Studies 2011, 359–412.

⁶³ But see: Amnesty International, Document – Israel and the Occupied Palestinian Territories: Israel/Gaza Conflict, July 2014, Questions & Answers, 25 July 2014, available at www.amnesty. org/en/library/asset/MDE15/017/2014/en/5b79b682-8d41-4751-9cbc-a0465f6433c3/ mde150172014en.html [accessed on 16 July 2015] (claiming that Israel did not fulfil its duty to give effective advance warning).

⁶⁴ ST. THOMAS AQUINAS, On Politics and Ethics (13th century) (translated by P.E. SIGMUND), New York, W.W. Norton & Company, 1987, 49; SIR THOMAS MORE, Utopia (1516) (translated by P. TURNER), Harmondsworth, Penguin Books, 1965, 111–112.

⁶⁵ See T.C. WINGFIELD, "Chivalry in the use of force", 32 U. Toledo L. Rev. 2001, 111–136, 131; T.C. WINGFIELD, "Taking aim at regime elites: assassination, tyrannicide, and the Clancy doctrine", 22 Maryland J. Int'l L. & Trade 1999, 299.

⁶⁶ Regulations concerning the Laws and Customs of War on Land, Annex to the Hague Convention IV of 18 October 1907 (*Compendium* 35).

resort to perfidy". In sum, the law of armed conflict permits the singling out of an individual soldier as a target provided the attack is carried out without treachery or perfidy. The same goes for the targeting of an enemy head of State, if he or she would qualify as a combatant, albeit that attacks against foreign leaders have generally been limited as a matter of comity.⁶⁷

In modern-day literature, the terms "perfidy" and "treachery" are commonly used as synonyms; preference is given however to the term "perfidy". The real problem is to distinguish unlawful acts of perfidy from ruses of war, which are not unlawful, as set out in Article 24 Hague Regulations and Article 37(2) AP I. The latter Article describes ruses of war as acts intended to mislead an adversary or to induce him to act recklessly, which do not infringe rules of the law of armed conflict, and which are not perfidious. Examples are the use of camouflage, decoys, mock operations and misinformation. Perfidy, on the other hand, is defined by Article 37(1) AP I as "acts inviting the confidence of an adversary to lead him to believe that he is entitled to, or is obliged to accord, protection under the rules of international law applicable in armed conflict, with the intent to betray that confidence". Three elements are at the core of this concept. Firstly, there has to be an intentional betrayal of confidence. Secondly, this confidence must relate to protection under the rules of the law of armed conflict. Finally, perfidy is prohibited only insofar as it intentionally kills, injures or captures⁶⁸ the enemy. Essentially, the prohibition of perfidy pertains to the prohibition of pretending to benefit of a particular protective regime under the law of armed conflict, while abusing the adversary's belief that he is obliged to accord such protection, in order to kill, injury or, under the rules of AP I, capture that adversary. In short, one invites to obtain, and subsequently breaches, the enemy's confidence, thus violating principles of good faith.⁶⁹

Article 37(2) contains a non-exhaustive list of examples of perfidy: 1) feigning a desire to negotiate under a truce or surrender flag; 2) feigning incapacitation by wounds or sickness; 3) feigning non-combatant status; and 4) feigning protected status by the use of signs, emblems or uniforms of the UN or States not party to the conflict.⁷⁰

⁶⁷ The United States Army Operational Law Handbook, for example, remarks that the principle of military necessity forbids the killing of a head of state in wartime *if his death is not indispensable* for securing the submission of the enemy: J. RAWCLIFFE and J. SMITH (eds.), US *Army Judge-Advocate General's Operational Law Handbook*, 2006, available at www.fas.org/ irp/doddir/army/law0806.pdf [accessed on 16 July 2015].

⁶⁸ For the sake of exhaustivity, mention must be made of the fact that, qua customary international law, a number of States that are non-signatory to AP I, refuse to recognise that there would also be a customary prohibition to "capture" an enemy by resort to perfidious methods of warfare. See also the discussion contained in J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 225.

⁶⁹ *Ibid.*, 223.

⁷⁰ E.g., when Bosnian Muslims fled after the fall of Srebrenica in July 1995, Bosnian Serbs wearing stolen UN uniforms and driving stolen UN vehicles managed to lure dozens of them into captivity. Those whom they got their hands on were killed by firing squads.

It will often be hard to determine whether specific conduct amounts to perfidy or not.⁷¹ Advancing under the enemy flag or while wearing enemy uniforms, for example, constitutes a lawful ruse. In the context of an actual attack, however, this conduct may become unlawful, provided the various components of the definition of "perfidy" have been met.

An example of a lawful attack concerns the killing of the Admiral Isoroku Yamamoto, whose plane was ambushed and shot down in 1943, after the US military had successfully broken the Japanese communication codes and found out about the admiral's travel plans.⁷² The killing of SS General Heydrich in 1942 on the other hand seems unlawful.⁷³ Heydrich died when a bomb was thrown into his car by two ununiformed members of the Free Czechoslovak army. This action did not constitute lawful camouflage, but rather perfidious feigning of civilian status.

As to the applicability of the prohibition on perfidy, it must finally be stressed that this rule forms part of customary international law and therefore binds States whether or not they have adhered to the treaties. This is evidently true with regard to international armed conflicts, as the rule is enshrined in the Hague Regulations and AP I, as well as a large number of military manuals.⁷⁴ With the possible exception of the "capture" prong of the treaty-based rule, evidence moreover suggests that the rule has attained customary status with regard to non-international armed conflicts as well.⁷⁵ Thus, the ICTY recognised in the *Tadić* case that "State practice shows that general principles of customary international law have evolved with regard to internal armed conflict also in areas relating to methods of warfare. [...] [M]ention can be made

⁷¹ See on this (stressing the need for a causative link between the perfidious act and the resulting death, injury or capture of an enemy): M. MADDEN, "Of wolves and sheep: a purposive analysis of perfidy prohibitions in international humanitarian law", 17 J. Confl. & Sec. L. 2012, 439-463.

⁷² See, e.g., P. ZENGEL, "Assassination and the law of armed conflict", 43 Mercer L. Rev. 1992, 627.

⁷³ Y. DINSTEIN, *supra* note 17, 95.

⁷⁴ See J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, *Vol. 2: Practice*, 1368 *et seq.*

⁷⁵ See: R.B. JACKSON, "Perfidy in non-international armed conflicts", 88 Naval War College - International Law Studies 2012, 237-259 (246-247: "Perfidy in the form of misuse of a protected emblem to capture an enemy in non-international armed conflict has not become customary international law"). In a similar vein: M.N. SCHMITT, C.H.B. GARRAWAY and Y. DINSTEIN, The Manual on the Law of Non-international armed conflict 2006, 43–44 available www.iihl.org/iihl/Documents/The%20Manual%20on%20the%20Law%20of%20NIAC. at pdf [accessed on 16 July 2015]. But see the conclusion by Henckaerts and Doswald-Beck that "killing, injuring or capturing by resort to perfidy is illegal under customary international law but that only acts that result in serious bodily injury, namely killing or injuring, would constitute a war crime": J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), supra note 4, 225 (emphasis added). Finding that there is authority in support of both competing positions: S. SIVAKUMARAN, The law of non-international armed conflict, Oxford, OUP, 2012, 419. See also the account of the Colombia mission to rescue a group of hostages from FARC captivity in: J.C. DEHN, "Permissible perfidy? Analysing the Colombian hostage rescue, the capture of rebel leaders and the world's reaction", 6 J. Int'l Crim. Just. 2008, 627.

of the prohibition of perfidy".⁷⁶ In similar vein, provided the other conditions for individual criminal responsibility are met, Article 8(2)(e)(ix) ICC Statute identifies the treacherous killing or wounding of a combatant as a violation of the laws and customs applicable in conflicts not of an international character.

2.3. STARVATION, SIEGE WARFARE AND RELIEF OPERATIONS

Customary international law forbids the starvation of civilians as a method of warfare, both with regard to international and internal armed conflicts⁷⁷ (see also Chapter 7 of this volume). As a matter of treaty-law⁷⁸, Article 54(1) AP I codifies the rule that "[s]tarvation of civilians as a method of warfare is prohibited". From the outset, it must be clearly understood that this relates only to starvation "of civilians", meaning that starvation of combatants is perfectly lawful. Furthermore, the scope of this provision is limited in that it only relates to starvation as a "method of warfare".

Although the prohibition of starvation of civilians "as a method of warfare" may seem evident nowadays, the outlawry of starvation is, historically speaking, a rather novel development. Indeed, for centuries, starvation of civilians was oftentimes regarded as a common feature of warfare, intended to bring about the surrender of the adversary by weakening and demoralising him, often in combination with siege warfare, i.e. the encircling of a defended city or fortress, while cutting of that city or fortress's supply channels. Not only was starvation of civilians regarded as an inevitable corollary of war, it used, moreover, to be considered lawful to prevent civilians from escaping a besieged town in order to increase the pressure on the defending force and hasten their surrender. Thus, when Field Marshal von Leeb ordered his artillery to fire on Russian civilians attempting to flee Leningrad through the German lines, this conduct was subsequently held to be lawful in the High Command case (1948). The tribunal in that case added: "we might wish the law were otherwise, but we must administer it as we find it".⁷⁹ Since that statement, the law on the subject has drastically evolved.

⁷⁶ ICTY Appeals Chamber, Prosecutor v. Tadić, Case No. IT-94–1-AR72, Decision of the Defence Motion on Interlocutory Appeal on Jurisdiction, 2 October 1995, \$125.

⁷⁷ J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 186–202. Consider also: Ethiopia-Eritrea Claims Commission, Partial Award, Western Front, Aerial Bombardment and related claims, Eritrea's Claims, 45 *I.L.M.* 2005, 396, §105.

⁷⁸ J.M. HENCKAERTS and L. DOSWALD-BECK (eds.) *supra* note 4, 186–189, argue that "State practice establishes this rule as a norm of customary international law applicable in both international and non-international armed conflicts".

⁷⁹ General Military Government Court of the US Zone of Germany, High Command Case (United States of America v. von Leeb et. al.), 27–28 October 1948, 11 Trials of War Criminals before the Nuremberg Military Tribunals under CCL 10 1950, 563.

The problem of civilian distress due to starvation was first addressed in GC IV,80 which provided steps that may lead to some form of protection for the civilians in this situation. The logic of GC IV proceeds along three steps. Firstly, parties to a conflict are urged (Article 17 GC IV uses the words "shall endeavour") to conclude agreements for the removal from besieged or encircled areas of wounded, sick and aged persons, children and maternity cases, and for the passage of medical personnel and equipment to such areas. Secondly, subject to certain preconditions, parties are obliged to allow the free passage of all consignments of medical and hospital stores for exclusively civilian use, as well as "essential foodstuffs and clothing intended for children, pregnant women and maternity cases" (Article 23 GC IV), i.e. as far as these "essential foodstuff and clothing" are concerned, this does not relate to the civilian population at large. Finally, for the case of occupation, Occupying Powers are - under certain preconditions as well – under the duty to ensure the food and medical supplies of the population in the occupied territory to the fullest extent of the means available to it (Article 55 GC IV).

Needless to say these are very narrow provisions. In 1949, States were very anxious to retain control. Article 17 GC IV does not provide for compulsory evacuation, but merely recommends that an agreement be concluded thereto. Secondly, Articles 17 and 23 GC IV only address certain groups which are deemed particularly vulnerable and are, most prominently, limited to a narrow scope of humanitarian goods only. Finally, Article 55 GC IV is only applicable in situations of belligerent occupation.

AP I has to some extent expanded the scope of protection to civilians on this topic. Thus, Article 54 AP I forbids parties to a conflict to attack, destroy, remove or render useless objects indispensable to the survival of the civilian population, *for the specific purpose* of denying them for their sustenance value to the civilian population or to the adverse party, regardless of the underlying motive (Article 54(2) AP I). "Indispensable" objects can include any of the following: foodstuffs, crops, livestock, drinking water and irrigation works. As the examples listed in Article 54 AP I are non-exhaustive, other non-food objects, such as medicines or blankets, may arguably also be covered. Only two exceptions are allowed. Firstly, the prohibition does not apply when the objects are used *solely* as sustenance for the members of adverse party's armed forces, or in direct support of military action, provided, however, that in the latter case, the civilian population be left with adequate food and water.⁸¹ Secondly, a party may lawfully derogate from the prohibition enshrined in Article 54(2) AP I

⁸⁰ Geneva Convention (IV) relative to the Protection of Civilian Persons in Time of War of 12 August 1949 (hereinafter GC IV) (*Compendium* 97).

⁸¹ Dinstein strongly critiques Art. 54 AP I on the ground that it *de facto* implies a broad, and unrealistic, injunction against sieges involving civilians. According to the author: "It stands to reason that the practice of States will not confirm the sweeping abolition of siege warfare affecting civilians": Y. DINSTEIN, *supra* note 6, 454–550.

while retreating or evacuating from its own territory prior to its occupation by an invading army. In such situations, "imperative military necessity" may justify resort to a "scorched earth" policy, a famous historical example thereof being the Russian policy to systematically burn all crops during Napoleon's calamitous Moscow campaign. Another example would be the flooding of low-lying areas in order to slow down the adversary's advances.

It should be reiterated that Article 54 AP I does not affect the legality of starvation of combatants. Neither is it intended to alter existing rules on naval or aerial blockades. Furthermore, Article 54 ("as a method of warfare") does not prohibit military operations which only incidentally deprive civilians of foodstuffs, while serving particular military interests. For this reason, it is allowed to destroy crops in order to deny cover to enemy forces.⁸² In a similar vein, combatants may lawfully mine a field in order to prevent enemy troops from passing through (subject, of course, to the principle of distinction, and applicable treaty rules (cf. the second Protocol to the Convention on Conventional Weapons or the Ottawa Convention on anti-personnel mines)). If, however, the goal would be to deprive civilians of their harvest, the conduct may become unlawful as per the conditions of Article 54 AP I.

Both the general prohibition on starvation of civilians as a method of warfare and the prohibition to destroy, attack or remove objects indispensable to the survival of the civilian population are also included in AP II dealing with noninternational armed conflicts (Article 14 AP II), albeit without copying the aforementioned exceptions. The inclusion of Article 14 AP II was due to the intervention during the 1977 Conference of the representative of the Holy See, who strongly objected to the proposed deletion of the Article from the draft text.⁸³

In order to gain a better insight into the legal framework governing starvation and siege warfare, the rules of Article 54 AP I and Article 14 AP II must be read in conjunction with the provisions on humanitarian relief operations. Various situations must be clearly distinguished in order to understand the multifaceted nature of the currently applicable legal framework. A comprehensive assessment of these provisions is outside the scope of this contribution.

Articulated for the situation of occupation, yet conceptually applicable to all situations of armed conflict, mention must be made of Article 69 AP I. This provision has expanded the list of goods that can explicitly be regarded as "essential to the survival of the civilian population". This list now also covers "clothing, bedding, means of shelter" along with the catch-all of "other supplies *essential to the survival of the civilian population of the occupied territory*" (emphasis added). Therefore, the bottom line is that humanitarian assistance includes those supplies that are "essential to the *survival* of the civilian

⁸² L. GREEN, *The Contemporary Law of Armed Conflict*, 2nd ed., Manchester, MUP, 2000, 143.

⁸³ I. DETTER, *The Law of War*, 2nd ed., Cambridge, CUP, 2000, 298.

population" (emphasis added), which is a narrow phrase that does not easily extend to welfare-enhancing or other developmental activities. Humanitarian relief, as circumscribed by the law of armed conflict, primarily seeks to ensure the survival and dignity of the victims of an armed conflict.⁸⁴

The thrust of the legal framework pertaining to humanitarian relief in situations of occupation is to be found in Article 59 GC IV, which states that, "if the whole or part of the population of an occupied territory is inadequately supplied, the Occupying Power *shall agree* to relief schemes on behalf of the said population, and shall facilitate them by all the means at its disposal" (emphasis added). This means that, if the condition at the beginning of the sentence is fulfilled in practice (i.e. the civilian population is inadequately supplied), the Occupying Power arguably has an actual legal obligation, under the law of armed conflict, to accept offers of relief made with regard to operations inside the occupied territory.

The legal regulation of relief schemes in occupied territory stands, in this regard, in contrast with the treaty-based legal framework regarding humanitarian relief schemes in non-occupied territory while in situation of armed conflict. "Consent" of the belligerent party to the relief action in question, is indeed the name of the game. As far as international armed conflicts are concerned, this requirement of consent can be found in Article 70 AP I ("subject to the agreement of the Parties concerned"). As far as non-international armed conflicts reaching the threshold of AP II are concerned, this can be found in Article 18 AP II ("subject to the consent of the High Contracting Party concerned"). As far as non-international armed conflict reaching only the threshold of common Article 3 to the GCs are concerned, the law does not go any further than to state that "[a]n impartial humanitarian body, such as the International Committee of the Red Cross, may offer its services to the Parties to the conflict", i.e. no actual obligation can be deduced therefrom for the belligerent parties. There is, in short, no "right of access" for anyone in these situations. Legally speaking, everything depends exclusively and entirely upon the consent of the belligerent party in question. Initially, the law was understood to mean that the party to the armed conflict, to which the offer of services had been made, retained its full discretion with regard to deciding whether or not to accept such an offer. On this particular point, international law has undergone drastic modifications in that it is now accepted as a mainstream legal doctrine that, when an offer of services is made by an impartial humanitarian organisation, "consent" cannot be refused on arbitrary grounds.85 This position

⁸⁴ Consider in this context The Public Commission to examine the maritime incident of 31 May 2010 (the Turkel Commission), Report, Part One, January 2011, §§78 *et seq.* (particularly §80), available at www.turkel-committee.gov.il/files/wordocs//8707200211english.pdf [accessed on 17 July 2015].

⁸⁵ In this sense, e.g., C.A. ALLEN, "Civilian starvation and relief during armed conflict: the modern humanitarian law", 19 Ga. J. Int'l & Comp. L. 1989, 72. See also ICRC, "Q & A

is linked to the fact that, under general international law, a party to an armed conflict carries the primary responsibility to meet the humanitarian needs of the population under its control. Thus, where such party is unable or unwilling itself to meet these needs, it has to accept offers made in this regard by impartial humanitarian organisations.

As final step in the analysis, The fact that consent has been granted, does not preclude a belligerent party to exercise control over relief operations in order to determine whether they are of an exclusively humanitarian and impartial nature, as set out in great detail in Article 70 AP I. Relief personnel are moreover required to respect domestic law and to take account of the security requirements in force (Article 71 AP I). Obviously, these are provisions leaving a great deal of discretion in the hands of the belligerent party.

The reluctance of belligerent parties to allow access to relief operations occasionally attracts the attention of the international community. In relation to the Syrian civil war, for instance, the UN Security Council adopted a resolution in early 2014 demanding "that all parties, in particular the Syrian authorities, promptly allow rapid, safe and unhindered humanitarian access".⁸⁶ Even after the adoption of the resolution, however, the United Nations rejected calls for it to deliver humanitarian aid across borders into Syria without the approval of the government in Damascus, instead asserting that such operations would only be possible under a stronger Chapter 7 resolution.⁸⁷

Despite the fact that the various rules on starvation and humanitarian relief operations are considered to be part of customary international law, both with regard to international and non-international armed conflicts,⁸⁸ deliberate starvation and impediment of humanitarian relief action was widely practiced in the conflicts in Ethiopia, Sudan, Laos, Nigeria, the former Yugoslavia, etc.⁸⁹ It regrettably remains a recurrent feature in more recent conflicts, such as the Syrian civil war.⁹⁰ Moreover, in reality, armed forces often condition the passage of humanitarian convoys on the yielding of a substantial part of the supplies to the armed forces. Given the preponderance of these violations in the context of non-international armed conflicts, it is most regrettable that the ICC Statute does

and Lexicon on Humanitarian Access", 2014, available at https://www.icrc.org/eng/assets/ files/2014/icrc-q-and-a-lexison-on-humanitarian-access-06–2014.pdf [accessed on 17 July 2015].

⁸⁶ UNSC Resolution 2139 of 22 February 2014, UN Doc. S/RES/2139.

⁸⁷ See: T. RUYS and N. VERLINDEN, *supra* note 37, 350.

⁸⁸ See J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 186–202.

⁸⁹ E.g., K. OTENG KUFUOR, "Starvation as a means of warfare in the Liberian conflict", 41 Neth. Int'l L. Rev. 1994, 313–331; J.S. BASHI, "Prosecuting starvation in the Extraordinary Chambers in the Courts of Cambodia", 29 Wisconsin Int'l L.J. 2011, 34–69; INTERNATIONAL CRISIS GROUP, "Ending starvation as a weapon of war in Sudan", Africa Report No. 54, 14 November 2002, available at www.crisisgroup.org/en/regions/africa/horn-of-africa/sudan/054-endingstarvation-as-a-weapon-of-war-in-sudan.aspx [accessed on 23 July 2015].

See e.g., Report of the independent international commission of inquiry on the Syrian Arab Republic, 12 February 2014, UN Doc. A/HRC/25/65, §\$13, 132, 135 & 139.

not list intentional starvation and the wilful impediment of relief supplies among the violations of the laws and customs applicable in non-international armed conflicts. Article 8(2)(b)(xxv) ICC Statute does however consider, provided the other conditions for individual criminal liability have been met, these acts to constitute war crimes when committed in the context of an international armed conflict.

2.4. PROTECTION OF THE NATURAL ENVIRONMENT⁹¹

Despite large-scale environmental destruction during the Second World War, from burning oil fields in Romania to the mushroom clouds over Japan, States initially showed little interest for the cause of the environment in times of armed conflict.⁹² This was illustrated by the complete absence of the term in the 1949 Geneva Conventions. The only protection awarded by law of armed conflict was of an indirect nature and had to be derived from the general principles concerning military necessity and proportionality.⁹³ As a result, environmental damage was accepted insofar as it served a military purpose and did not cause damage which would be excessive in relation to the concrete and direct military advantage anticipated from the attack. Clearly, under the logic of the principle of distinction, the natural environment has to be regarded as civilian in nature, and thus cannot be directly attacked. The natural environment was, however, only protected from *direct* attack, with indirect attacks remaining permissible to the extent not prohibited under the principle of proportionality.

The lack of specific protection accorded by the law of armed conflict to the natural environment was prominently brought to the attention of the international community as a result of the Vietnam War. Indeed, during the latter conflict, the American military used the destruction of forests and dense vegetation as a method of warfare, so as to deny cover to the Viet Cong guerrillas.⁹⁴ Enormous areas of land were stripped of all vegetation by spraying herbicides (so-called Agent Orange), or by means of heavy tractors. Large-

⁹¹ Further: R.G. RAYFUSE (ed.), War and the environment: new approaches to protecting the environment in relation to armed conflict, Leiden, Nijhoff, 2014, 234; United Nations Environment Programme, Protecting the environment during armed conflict: an inventory and analysis of international law, Nairobi, UNEP, 2009, 83; R.J. GRUNAWALT, J.E. KING and R.S. MCCLAIN (eds.), Protection of the environment during armed conflict, 69 Naval War College – Int'l L. Studies 1996, 720; Y. DINSTEIN, "Protection of the environment in international armed conflict", 5 Max Planck Yb. UN L. 2001, 523–549.

⁹² M.N. SCHMITT, "Green War: An assessment of the environmental law of international armed conflict", 22 Yale J. Int'l L. 1997, 9.

⁹³ The applicability of these principles was confirmed, *inter alia*, by the General Assembly, the ICRC and the ICJ: see, e.g., UNGA Resolution 47/37 of 25 November 1992 (protection of the environment in times of armed conflict), adopted without a vote; ICJ, *Legality of the Threat or Use of Nuclear Weapons, supra* note 4, §62.

⁹⁴ See M.N. SCHMITT, *supra* note 92, 9–11.

scale deforestation was combined with other practices, such as the (attempted) seeding of clouds in order to lengthen the rainy season. The consequences to the natural environment were considerable.

As a result, the environmental impact of the Vietnam War soon spurred calls for new law. A two-track approach was followed. First of all, negotiations on limiting environmental warfare led to the conclusion in 1977 of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques⁹⁵, which deals specifically with techniques of warfare that involve the deliberate manipulation of natural processes. Article I forbids States that are party to the Convention to engage in military, or any other hostile use of environmental modification techniques having "widespread, long-lasting or severe" effects as the means of destruction, damage or injury to another State Party. States must moreover refrain from assisting, encouraging or inducing other States to engage in such activities.

The phenomena envisaged by the prohibition may include *inter alia*, as a military technique, the triggering of earthquakes, tsunamis, changes in weather patterns, changes in climate patterns, changes in ocean currents, changes in the state of the ozone layer, upsets in the ecological balance of a region, and changes in the state of the ionosphere. Although ENMOD was inspired by the possible development of science-fiction-type weapon systems (such as "cloud seeding"), it could possibly – provided the general conditions of "widespread, long-lasting or severe" have been met – also comprise more "traditional" means and methods of warfare, such as the widespread use of herbicides or fire to destroy forests. At the same time, the Convention is sometimes criticised for exclusively prohibiting the use of, and not the testing or development of, the said techniques. Another stumbling block is the weak investigation and enforcement system provided by ENMOD.

Obviously, the key to understanding the proper scope of application of this Convention is to figure out what exactly is meant by the words "widespread, long-lasting or severe". The negotiating States adopted an Understanding, which provided some further guidance as to how each of these concepts is to be understood.⁹⁶ Overall, it may be observed that each of these concepts is to be understood very restrictively.⁹⁷ On the other hand, it must be emphasised that the three criteria used in the ENMOD convention are disjunctive and not

⁹⁵ Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques of 18 May 1977 (*Compendium* 388).

⁹⁶ Reproduced in A. ROBERTS and R. GUELFF, *Documents on the Laws of War*, Oxford, OUP, 2000, 407: "It is the understanding of the Committee that, for the purpose of this Convention, the terms 'widespread', 'long-lasting' and 'severe' shall be interpreted as follows: (a) 'widespread': encompassing an area on the scale of several hundred square kilometres; (b) 'long-lasting': lasting for a period of months, or approximately a season; (c) 'severe': involving serious or significant disruption or harm to harm life, natural and economic resources or other assets".

⁹⁷ S. OETER, *supra* note 6, 213 (3rd ed. at 127).

cumulative in nature. In this, ENMOD drastically differs from AP I, which the following paragraphs will now address.

A second remedy adopted and inspired by the experience of the Vietnam War concerns the inclusion of two provisions in AP I, Articles 35(3) and 55, which for the first time provide for some limited form of direct environmental protection in situations of international armed conflict (see also *supra* Chapter 7 of this volume). Article 35(3) AP I prohibits the use of means or methods of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment. Article 55 AP I further elaborates the prohibition, while stressing that damage to the environment which prejudices the health or survival of the population is fully covered. Thus, the provisions respond equally to the anthropocentric value camp, which advocates the protection of nature for the sake of mankind, and the intrinsic value camp, which champions the protection of nature as a goal in itself.⁹⁸

Although overlap may occur between the ENMOD Convention and Articles 35(3) and 55 AP I, it is clear that the latter provisions cover a far broader range of activities. Indeed, whereas ENMOD only considers the manipulation of the environment as a method of warfare, the Protocol protects the environment (and the population) against damage inflicted by all means or methods of warfare. Furthermore, unlike ENMOD, the Protocol is not constrained to intentional damage, but also outlaws purely incidental damage which "may be expected" to occur.99 On the other hand, it must be recalled that, whereas the ENMOD prohibition is violated as soon as the damage is either widespread, long-lasting "or" severe, the Protocol requires that all three criteria are fulfilled cumulatively, implying that the AP I provisions set a higher "effects" threshold. Furthermore, ENMOD and AP I award different interpretations to the identical terms.¹⁰⁰ The Understanding of the ENMOD Convention, referred to above, expressly indicates that the definitions enshrined therein are intended exclusively for the purpose of the ENMOD Convention and do not prejudice the interpretation of provisions in other international agreements. Indeed, AP I adopts a radically different approach when it comes to the "long-term" nature of environmental damage. According to the travaux préparatoires the latter term should be understood in terms of decades, rather than months or a season, thus significantly raising the bar to the point where the prohibition will be inapplicable in most cases.¹⁰¹ The term "widespread", on the other hand, is interpreted similar to the ENMOD Understanding. Finally, the precise meaning of the adjective "severe" in Articles 35(3) and 55 AP I remains unclear. Clearly, the fact of having two different texts with differing yardsticks, the precise

⁹⁸ Y. DINSTEIN, *supra* note 17, 182.

⁹⁹ S. OETER, *supra* note 6, 127–128.

¹⁰⁰ A. BOUVIER, "Protection of the natural environment in time of armed conflict", 31 Int'l Rev. Red Cross 1991, 575–576.

¹⁰¹ See *ibid.*; Y. DINSTEIN, *supra* note 6, 211.

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operational implications of which are far from clear, is anything but an optimal situation in terms of providing belligerent parties with clear and accessible rules.

Despite the fact that both ENMOD and the provisions of AP I may have contributed to a better protection of the environment in times of war, many authors feel the existing legal framework remains woefully inadequate. Their criticism seems at least partially justified, as the limited scope of the ENMOD Convention and the high threshold of AP I leave significant leeway for intentional and direct damage to the environment, all of which may fully fall within the boundaries of currently existing law on the matter. This becomes clear when we apply the respective criteria to the 1991 Gulf War. During the latter conflict, Saddam Hussein, acting in a final defiant gesture, ordered his troops to release large quantities of oil into the Persian Gulf by opening the valves of oil terminals, causing the largest oil spill ever. Furthermore, over 600 Kuwaiti oil wells were set ablaze, resulting in huge smoke plumes and heavy atmospheric pollution. Yet, this conduct does not seem to violate the prescriptions of the ENMOD Convention, as it did not involve any deliberate manipulation of natural processes.¹⁰² Neither was the damage "long-lasting" in the sense of AP I, given the fact that it took less than a year to extinguish the fires and to clean up the oil spills. Hence, it turns out to be impossible to qualify these activities as unlawful as per the specific protection granted under the law of armed conflict to the natural environment. Be that as it may, it may however be possible to qualify them as unlawful as per the general rules of the law of armed conflict. As far as the latter are concerned, indeed, the acts could arguably be considered to have violated the basic principle of military necessity, as they were by and large motivated by a desire for revenge. Even if one would concede that the behaviour was aimed at hindering an invasion from the sea or impeding target acquisition by enemy planes, the damage inflicted would arguably be clearly excessive.

The legal lacunae exposed by the 1991 Gulf War led to calls to expand the scope of the ENMOD Convention and even to proposals of a fifth Geneva Convention dealing specifically with the environment.¹⁰³ Others have begun to examine to what extent it is possible to borrow from international environmental law proper to remedy the shortcomings of IHL in this context.¹⁰⁴ In 2011, the International Law Commission decided to include the "protection of the environment in relation to armed conflicts" in its programme of work, with a view to clarifying the international legal framework governing the protection of

¹⁰² L. EDGERTON, "Eco-terrorist acts during the Persian Gulf War: Is international law sufficient to hold Iraq liable?", 22 Ga. J. Int'l & Comp. L. 1992, 172.

¹⁰³ See M.N. SCHMITT, supra note 92, 22–35. Further: G. PLANT (ed.), Environmental protection and the law of war: a 'Fifth Geneva' convention on the protection of the environment in time of armed conflict, London, Belhaven Press, 1992, 284.

¹⁰⁴ See e.g., M. BOTHE, C. BRUCH, J. DIAMOND and D. JENSEN, "International law protecting the environment during armed conflict: gaps and opportunities", 92 *Int'l Rev. Red Cross* 2010, 569–592.

the environment before, during and after an armed conflict.¹⁰⁵ However, apart from a few declaratory or recommendatory documents, these calls and initiatives have borne little fruit until now.¹⁰⁶ As a result, the practical impact of the various provisions in terms of actually outlawing particular methods of warfare remains unclear, and in any event doubtful, up to this day. Again in 2000 for example, the Committee established by the ICTY prosecutor to review the NATO bombing campaign against the Federal Republic of Yugoslavia concluded in its final report that the threshold of Articles 35 and 55 AP I was so high as to make it difficult to find a violation.¹⁰⁷ Clearly, States have preferred to remain quite open-ended as to the permissible scope of activities when it comes to activities affecting the natural environment.

Another subject of disagreement concerns the question whether Articles 35(3) and 55 AP I and the ENMOD Convention are part of customary international law. Several authors reject this approach on the grounds that the various provisions constituted new law at the time of their adoption and prohibit methods of combat which in principle could be justified as militarily necessary.¹⁰⁸ In the Nuclear Weapons Advisory Opinion, the ICJ appears to have followed the latter approach with regard to the Protocol provisions.¹⁰⁹ The United States, the United Kingdom and France have, moreover, on a number of occasions rejected the customary character of Articles 35(3) and 55, in particular with regard to nuclear weapons.¹¹⁰ On the other hand, several States considered the rules to be customary in their submissions to the ICJ in the Nuclear Weapons case.111 The Committee established to review the NATO bombing campaign suggested likewise (§15 of the Final Report). Moreover, the practice of the three objecting countries is far from consistent. During the 1991 Gulf War, for example, the United States and the United Kingdom accused Iraq of violating Articles 35(3) and 55 AP I, although Iraq had never ratified the Protocol. Taking into account the conflicting evidence, Henckaerts and Doswald-Beck for their part conclude that Articles 35(3) and 55 AP I are norms of customary character with regard to international, and arguably also non-international armed conflicts, although 1) the United States is a persistent objector to the rule and 2) France and the United Kingdom are persistent objectors with regard to their

¹⁰⁵ See e.g., ILC, Report on the work of its sixty-fifth session, 2013, UN Doc. A/68/10, 105–107.

¹⁰⁶ E.g. UNGA Resolution 47/37 of 25 November 1992. See also the Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict, in 78 Int'l Rev. Red Cross 1996, 230–237.

¹⁰⁷ See Final Report to the Prosecutor by the Committee established to review the NATO Bombing Campaign against the Federal Republic of Yugoslavia of 13 June 2000, 39 *ILM* 2000, \$\$14 *et seq.*

¹⁰⁸ S. OETER, *supra* note 6, 215–216; Y. DINSTEIN, *supra* note 17, 185.

¹⁰⁹ ICJ, Legality of the Threat or Use of Nuclear Weapons, supra note 4, §31.

¹¹⁰ See J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 153–4.

¹¹¹ Ibid., 152, footnote 55 (referring to the oral pleadings and/or written statements of New Zealand, the Solomon Islands, Sweden, Zimbabwe, India, Lesotho, the Marshall Islands, Nauru and Samoa).

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application to the use of nuclear weapons.¹¹² In all fairness, it must be concluded that, as far as the question whether these provisions have been raised to the level of customary international law is concerned, defendable arguments can be invoked in either direction.

Causing "widespread, long-term and severe damage to the natural environment" may moreover constitute a war crime in the sense of Article 8(2) (b)(iv) ICC Statute. To this end, it is not sufficient that the damage is intended *or* expected as set forth in the Protocol. The ICC Statute applies a higher threshold by demanding *both* intent and knowledge. Moreover, for a war crime to take place, the damage must also be clearly excessive in relation to the direct overall military advantage anticipated.

Other than the natural environment qualifying as a civilian object – and benefiting from all provisions pertaining to the general protection of civilian objects – its specific protection remains cursory and patchy at best under the present day law of armed conflict.

2.5. REGULATION OF CERTAIN OTHER ACTIVITIES

Apart from the principles spelled out in the previous sections, the law of armed conflict contains numerous other provisions regarding certain other methods of warfare. A comprehensive overview falls beyond the scope of the present contribution.

Some of these provisions are connected to specific types of warfare that have been historically resorted to at the strategic or operational level. Examples are the rules on naval warfare, which deal with prize and contraband, and the creation of naval blockades or submarine warfare. The relevant rules governing maritime hostilities are spread over various instruments belonging to the realm of the law of armed conflict, but have recently been brought together in the San Remo Manual,¹¹³ an informal expert-driven restatement of existing law in the area of naval warfare. Although non-binding in nature, the Manual provides an important restatement of existing law, together with some progressive development (as compared to the 1949 Geneva Conventions) in light of recent state practice and technological innovations.

A second category of such rules is linked to the principles on targeting and distinction. Examples hereof are the prohibition to attack non-defended towns or villages,¹¹⁴ rules pertaining to "human shields"¹¹⁵ or the prohibition

¹¹² J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 151–158.

¹¹³ L. DOSWALD-BECK (ed.), San Remo Manual on International Law Applicable to Armed Conflicts at Sea, Cambridge, CUP, 2005, 257 (prepared by the International Institute of Humanitarian Law).

¹¹⁴ Art. 25 Hague Regulations; Art. 59 AP I.

¹¹⁵ Art. 28 GC IV; Art. 51(7) AP I.

of what is commonly referred to as "carpet bombing", also often termed "area bombardment".¹¹⁶ Other restrictions on the methods of warfare are derived from the general requirements of respect for human dignity and humane treatment of the civilian population. Concrete examples hereof are the rules proscribing slavery,¹¹⁷ enforced prostitution or rape.¹¹⁸ Although such conduct may qualify, provided the specific conditions set out in the ICC Statute have been met, as a crime against humanity,¹¹⁹ many recent conflicts, especially those of a non-international armed nature involving non-state organised armed groups, regrettably illustrate that the rules are still too often honoured in the breach. In what follows, a number of methods of warfare will be dealt in a somewhat more in–depth manner.

2.5.1. Espionage

According to Article 24 of the Hague Regulations, the employment of measures necessary for obtaining information about the enemy is considered permissible. Absent an explicit prohibition, acts of espionage are therefore not forbidden under the international law of armed conflict, and as such do not constitute a violation of this (international) legal framework. This was recognised by the Dutch Special Court of Cassation in the 1949 *Flesche* case: "[Espionage] is a recognized means of warfare and therefore is neither an international delinquency on the part of the State employing the spy nor a war crime proper on the part of the individual concerned."¹²⁰ In any armed conflict, being able to gather information of military value about one's enemy is of prime importance, thus it is only logical that States have never considered espionage as impermissible as a matter of public international law.

The definition of a "spy" is relatively narrow, in that, pursuant to Article 29 Hague Regulations, "a person can only be considered a spy when, acting clandestinely or on false pretences, he obtains or endeavors to obtain information in the zone of operations of a belligerent, with the intention of communicating it to the hostile party". Furthermore, Article 46(2) and (3) AP I drastically limit the scope of individuals who can be considered as spies, by excluding, for instance, any person gathering information while "in the uniform of *his armed forces*" (emphasis added).¹²¹

¹¹⁶ Art. 51(5)(a) AP I. See also J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 45, referring to the declaration made by the USA during the negotiations of AP I, to which it is subscribed here, that the words "clearly separated and distinct military objectives" require a distance "at least sufficiently large to permit the individual military objectives to be attacked separately".

¹¹⁷ Art. 4(2)(f) AP II.

¹¹⁸ Art. 27 GC IV; Art. 76 AP I; Art. 4(2)(e) AP II.

¹¹⁹ E.g. Art. 7(c) and (g) ICC Statute.

¹²⁰ Special Court of Cassation of the Netherlands, In re Flesche, 27 June 1949, 16 Ann. Dig. 1949, 267. Consider also: G.D. SOLIS, supra note 6, 224.

¹²¹ In a similar vein, military aircraft on overt missions of information gathering shall not be deemed engaged in espionage. See HPCR, *Manual on international law applicable to*

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Spies nevertheless enjoy an unfavourable position in time of armed conflict.¹²² Indeed, Articles 29–31 Hague Regulations and Article 46 AP I indicate that captured spies are exposed to prosecution and punishment in accordance with the law of the belligerent party capturing them, i.e. under the domestic legal framework of the latter. They are not entitled to the protective regime for POWs. Thus, if the domestic legal framework of the belligerent party having captured a spy provides for this type of punishment, they may even be sentenced to death for engaging in espionage, although – arguably on the basis of Article 75 AP I – no punishment may be imposed without a proper trial meeting the standards of that provision.

Espionage can be undertaken by combatants and civilians alike. On the basis of Article 29 of the Hague Regulations, three cumulative ingredients can be discerned.¹²³ Firstly, the acts must have taken place behind enemy lines. This not only refers to the actual zone of operations of a hostile army, but to the whole territory occupied or controlled by the adverse party. Yet, the limitation of what is considered by the law of armed conflict as "espionage" pertains to the fact that it only relates to persons operating behind enemy lines.¹²⁴ Secondly, espionage involves the gathering or transmitting of information of military value for the benefit of the other side. Last but not least, the acts must have been carried out clandestinely or under false pretences. With regard to combatants, this implies that the person gathering information was acting in disguise, for example by assuming a false civilian identity or by wearing enemy or neutral uniforms. Thus, as previously indicated, combatants wearing the regular uniform of their own armed forces do not become spies. They may be fired upon (since they are combatants), but have to be awarded POW status when taken prisoner. Thus, based upon the cumulative application of these three criteria, quite a number of intelligence gathering activities that are regularly carried out in time of armed conflict by no means qualify as "espionage" as this term is understood under the law of armed conflict.

As mentioned before, while the international law of armed conflict does not consider espionage unlawful as per this legal framework, let alone consider this a war crime, captured spies may be prosecuted in accordance with the national criminal legislation of the captor State. However, when combatant spies are captured after rejoining the army to which they belong, they can no longer be prosecuted for espionage, but instead have to be treated as POWs. Moreover, in occupied territories, resident combatants can only be treated as spies when

air and missile warfare, New York, CUP, 2013, Rule 123; K. IPSEN, "Combatants and noncombatants", in D. FLECK (ed.), supra note 6, 325.

¹²² G.B. DEMAREST, "Espionage in international law", 24 Denver J. Int'l L. & Pol'y 1995-1996, 337-338.

¹²³ See Y. DINSTEIN, *supra* note 6, 241–242.; J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 390.

¹²⁴ Y. DINSTEIN, *supra* note 6, 241–242.

they are caught in the act. Civilian spies, on the other hand, cannot invoke any dispensation and remain liable for prior acts of espionage regardless of the circumstances of capture.¹²⁵

Even if they are not "spies" in the technical sense and absent express provisions to this end in treaty law, the situation of saboteurs is largely analogous.¹²⁶ Thus, acts of destruction carried out behind enemy lines are in principle lawful under the law of armed conflict, provided they are directed against military objectives and, in accordance with the applicable legal framework regulating the conduct of hostilities, feasible precautions are taken to avoid, or in any event minimise, collateral damage. However, upon capture, civilian saboteurs and military saboteurs not in uniform are liable to prosecution under national criminal law.¹²⁷ Unlike uniformed combatant saboteurs they do no benefit from the protective POW regime.

2.5.2. Denial of Quarter

The law of armed conflict has long condemned the practice of declaring that no surrender will be accepted and that there shall be no survivors. "Denial of quarter" was forbidden in the 1863 Lieber Code, as in Article 23(d) Hague Regulations. A clear violation of the rule took place when Hitler adopted the notorious *Kommandobefehl*, according to which enemy commandos were not to be taken prisoner. This practice was subsequently condemned as a war crime by the International Military Tribunal of Nuremberg. The rule enshrined in Article 23(d) Hague Regulations is strengthened by Article 40 AP I¹²⁸ which not only reiterates the prohibition to declare that there shall be no survivors, but also forbids the threat thereof or the conduct of hostilities on this basis. This prohibition has to be linked to two important corollaries, which are expressed in Articles 41 and 42 AP I. The former addresses enemies *hors de combat*, the latter deals with occupants of aircraft.

According to Article 41 AP I, enemies who are recognised or who, in the circumstances, ought to be recognised to be *hors de combat*, shall not be made the object of attack. The protective regime for individuals *hors de combat* is not limited to lawful combatants, but extends to all persons directly taking part in hostilities, including civilians taking a direct part in hostilities, mercenaries, spies and saboteurs. Three different categories, as set out in Article 41(2) AP I, are envisaged: persons who are in the power of the adverse party; persons who are defenceless because of unconsciousness, wounds or sickness (inasmuch as they refrain from any hostile act); and anyone who clearly indicates an intention to surrender.

¹²⁵ Special Court of Cassation of the Netherlands, *In re Flesche, supra* note 120, 272.

¹²⁶ L. GREEN, *supra* note 82, 150.

¹²⁷ Consider, e.g., US Supreme Court, Ex parte Quirin et al., 1942, 317 US 1, 35–36.

¹²⁸ As to non-international armed conflicts covered by AP II, the last sentence of Art. 4(1) thereof reads: "It is prohibited to order that there shall be no survivors".

Chapter 9. Means and Methods of Warfare

As to the second category, it must be understood that the law of armed conflict has a rather specific understanding of what it means to be "*hors de combat*". It means, in fact, exactly what it says: a given person is no longer able at all to fight ("defenceless").¹²⁹ Hence, a person who has been wounded but still manages to continue to fight, e.g. pulling the trigger of his weapon, cannot be considered *hors de combat*. This person, however, may still qualify as wounded or sick in the sense of the Geneva Conventions, provided he refrains from any act of hostility.

The third prong ("clearly [indicating] an intention to surrender")¹³⁰ can possibly be abused, in which case the act in question may qualify as perfidy according to Article 37(a) AP I. Intent to surrender can be expressed in a variety of ways, for example by laying down one's weapons and raising one's hands, or by displaying a flag of truce. As unequivocally stated in Article 41 AP I, these persons cannot be attacked. It is a different matter altogether, however, as to whether there is an obligation for the enemy to actually capture a person which has indicated a clear intention to surrender and, depending on the circumstances of the case, accord a protective status such as POW status. It is argued here that the answer shall be in the negative: the person indicating an intention to surrender cannot be attacked, but will not necessarily (have to) be captured either. The question as to whether or not to capture this person remains entirely within the discretion of the adversary.¹³¹

The immunity from attack granted to a person belonging to one of the three categories expires when he or she engages in hostile acts or attempts to escape, i.e. when that person is no longer genuinely *hors de combat* in the way in which this notion is understood by the law of armed conflict. However, POWs attempting to escape should only be fired upon as an extreme measure, after appropriate warnings have been given.¹³² Finally, throughout, it must be kept in mind that, when an enemy feigns being *hors de combat* and subsequently attempts to kill, injure or capture his adversary, he not only loses his privileged status, but may also commit an act of perfidy (see *supra*), for which he may –

¹²⁹ It has been suggested in the academic literature that the alleged US policy of conducting so-called "secondary" drone strikes or "follow-up" strikes on wounded survivors of first attacks may be hard to reconcile with the prohibition against denial of quarter. See, e.g., N. MELZER, "Human Rights implications of the usage of drones and unmanned robots in warfare", May 2013, Section 3.1.4, available at www.europarl.europa.eu/RegData/etudes/ etudes/join/2013/410220/EXPO-DROI_ET(2013)410220_EN.pdf [accessed on 17 July 2015]. Attacks against humanitarian personnel attempting to rescue the injured are of course prohibited.

¹³⁰ For an illustration, see Inter-American Commission on Human Rights, Report No. 55/97, Case No. 11.137: Argentina, OEA/ Ser/L/V/II.98, Doc. 38, December 6 rev., 1997, §\$182–185 (the Commission concluded that there was insufficient evidence to hold that Argentinian forces purposefully rejected a surrender attempt).

¹³¹ The view, as propounded here, is largely followed in J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 168.

¹³² Art. 42 GC III.

providing the particular conditions for criminal liability have been met – be tried as a war criminal.

A second specific area in which the duty to give quarter manifests itself concerns the rule that persons parachuting from an aircraft in distress may not be attacked during their descent, regardless of whether they may be expected to land in territory controlled by their own party (i.e. when, ultimately, it is likely that they will be able to continue to fight from there on) or in territory controlled by the adverse party. Upon landing, they must be awarded an opportunity to surrender before being made the object of attack, unless it is apparent that they are engaging in hostile acts. If the person having parachuted from the aircraft in distress attempts to evade capture by the adversary, this person shall not be considered as being hors de combat, i.e. this person can be attacked from that moment onwards. Again, this rule applies to all the "shipwrecked in the air",133 civilian and combatants alike. However, given their combat training and mission, airborne troops (i.e. persons not parachuting from an aircraft in distress, one of the key conditions of Article 42(2) AP I) are expressly excluded from this specific protection and remain liable to attack lest they clearly indicate their intention to surrender.

Each of the three rules spelled out above has been established as a norm of customary international law applicable in international armed conflicts.¹³⁴

2.5.3. Seizure and Destruction of Enemy Property¹³⁵

In situations of land warfare, customary international law accepts that belligerent parties are entitled, for whatever reason and even for no reason at all, to seize all movable public property belonging to the enemy State and captured on the battlefield as so-called "booty of war".¹³⁶ This obviously holds true for objects such as weapons and ammunition, yet it also holds true for objects which are not necessarily of a military character, such as means of transport and communication, money and food supplies, provided they belong to the enemy State.¹³⁷ An exception is made for submarine cables, which may not be seized except in the case of absolute necessity and on the condition that they are restored and compensated after the war.¹³⁸ Even medical units and supplies may

¹³³ Phrase used e.g. in the 1987 Commentary to the First Additional Protocol, Y. SANDOZ et al. (eds.), supra note 3, 495, §1636; J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), supra note 4, 171.

¹³⁴ J.M. Henckaerts and L. Doswald-Beck (eds.), *supra* note 4, 161–172.

¹³⁵ Further: B.B. Jia, "Protected Property' and its protection in international humanitarian law", 15 Leiden J. Int'l L. 2002, 131–153.

¹³⁶ J.M. HENCKAERTS and L. DOSWALD-BECK (eds.), *supra* note 4, 173–175. The present chapter obviously does not address issues of possible liability under the *jus ad bellum*. See on this: Eritrea Ethiopia Claims Commission, Final Award, Ethiopia's Damages Claims, 17 August 2009, §§271 *et seq*.

¹³⁷ Art. 53 Hague Regulations.

¹³⁸ Art. 54 Hague Regulations.

be seized as booty, as long as the care of the wounded and sick is guaranteed.¹³⁹ As indicated, the concept of "booty of war" is confined to *public* property belonging to the enemy. Private enemy property may in principle not be seized: on the basis of Article 33(2) GC IV, "pillage is prohibited".¹⁴⁰ Like civilians, enemy POWs must moreover be allowed to keep all their personal belongings.¹⁴¹

The rules on the lawful seizure of booty of war must be read in conjunction with the general principle, enshrined in Article 23(g) Hague Regulations, prohibiting the destruction or seizure of enemy property, "unless such destruction or seizure be imperatively demanded by the necessities of war", as well as the principle, enshrined in Article 38 GC IV requiring that "the situation of protected persons shall continue to be regulated, in principle by the provisions concerning aliens in time of peace".¹⁴² In occupied territories, requisitioning, i.e. the taking of necessities from a population for the use of the occupying army is accepted to some degree, although it must be proportionate to what the area can provide and must take the needs of the population into account.¹⁴³ Goods requisitioned from private individuals must moreover be restored and/or compensated at the conclusion of the war.

By demanding a reasonable connection with the aim of overcoming the enemy, the rule prohibits the destruction of public or private property as an end in itself. As a result, residential buildings may be destroyed as part of military operations but not as a punitive measure. Extensive destruction or appropriation of property, not justified by military necessity and carried out unlawfully and wantonly, moreover constitutes a grave breach of Article 147 GC IV. Under the provisions of the ICC Statute, destruction or seizure of enemy property not justified by military necessity can also be prosecuted as a war crime, both in international and non-international armed conflicts.¹⁴⁴

Booty of war becomes the property of the captor State, not of the individual who seizes it. The same goes for goods requisitioned from the civilian population. Soldiers are, however, not permitted to take home any "war trophies". In this context, as indicated, lawful seizure of war booty must

¹³⁹ Arts. 33 and 35 GC I.

¹⁴⁰ The distinction between public and private property may, however, not always be easy to make. Consider e.g., Israeli Supreme Court, *Al Nawar v. Minister of Defence, et al.*, H.C. (High Court) 574/82, reprinted in F. DOMB, "Judgments of the Supreme Court of Israel", 16 *Israel Yb. On Human Rights*, 321–328 (on the seizure by Israeli forces of machines and an enterprise in Lebanon allegedly belonging to the PLO).

¹⁴¹ Art. 4 Hague Regulations; Art. 18(1) GC III.

¹⁴² On the latter principle, see Eritrea Ethiopia Claims Commission, Partial Award, Civilians Claims, Eritrea's Claims 15, 16, 23 & 27–32, 17 December 2004, §\$123–151 ("If private property of enemy nationals is to be frozen or otherwise impaired in wartime, it must be done by the State, and under conditions providing for the property's protection and its eventual disposition by return to the owners or through post-war agreement.").

¹⁴³ Art. 52 Hague Regulations; T. GOLTZ, "Pillage", in R. GUTMAN, D.S. RIEFF and K. ANDERSON (eds.), Crimes of war: what the public should know, New York, Norton, 1999, 276.

¹⁴⁴ Art. 8(2)(a)(iv), (2)(b)(xiii) and (2)(e)(xii) ICC Statute.

be distinguished from unlawful "pillage" (or plunder) which has to do with the unlawful seizure of private property. The latter term refers to the forcible taking of private property by an invading or conquering army from the enemy's subjects for private or personal use.145 Numerous provisions of the law of armed conflict proscribe pillage in specific situations, for example pillage of wounded and sick combatants, pillage of the dead, pillage of wounded and sick civilians, pillage in occupied territories or pillage directed against cultural property.¹⁴⁶ Article 28 Hague Regulations moreover bans pillage of towns and other places, even in assault. Such conduct is sanctioned as a war crime according to the ICC Statute.¹⁴⁷ Last but not least, Article 33 GC IV outlaws pillage in general terms. In spite of these clear norms, pillage is no rare phenomenon in contemporary armed conflicts. It was widely practiced in the war between Abkhaz separatists and the new government of Georgia in 1992 and 1993.¹⁴⁸ And in the DRC v. Uganda case, the ICJ found that Uganda had violated its duty of vigilance by not taking adequate measures to prevent the widespread looting, plundering and exploitation of the DRC's natural resources.¹⁴⁹

2.5.4. Forced Labour, Deportation and Intimidation

Finally, mention can be made of three particular types of methods of warfare. The first concerns measures of intimidation against the civilian population, for example in order to secure obedience of an occupied people or to hasten surrender. Thus, "measures of intimidation or of terrorism" are explicitly declared as prohibited by Article 33(1) GC IV. This provision prohibits measures (which do not necessarily need to qualify as "attacks" in the sense of Article 49(1) AP I, see *supra*) that have as their primary objective to create panic among the population – for example a precision strike in a busy shopping street – even if the attacks do not result in any loss of life. Furthermore, no violation of the rule occurs when the intimidation is only an incidental by-product of an attack against a military objective or the result of genuine warnings (taken as part of the "precautions–in-attacks requirement", see *supra*) of impending attacks on such objectives.¹⁵⁰ Furthermore, Article 51(2) AP I prohibits "acts or threats of

¹⁴⁵ J.M. Henckaerts and L. Doswald-Beck (eds.), *supra* note 4, 185.

¹⁴⁶ Art. 15 GC I; Art. 18 GC II; Art. 16 GC IV; Art. 5 (4) Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict of 14 May 1954 (*Compendium* 158); Art. 47 Hague Regulations.

Art. 8(2)(b)(xvi) and (2)(e)(v) ICC Statute. Further: H. BODDENS HOSANG, "Pillaging: article 8(2)(b)(xvi)" in R.S.K. LEE (ed.), *The International Criminal Court: elements of crimes and rules of procedure and evidence*, Ardsley, Transnational Publishers, 2001, 167–177.
 Scort T. COURT. Super articles 143.

⁴⁸ See: T. GOLTZ, *supra* note 143.

¹⁴⁹ ICJ, Armed Activities on the Territory of the Congo (DRC v. Uganda), 19 December 2005, ICJ Rep. 2005, 168, §\$242–245. See further, on the unlawful exploitation of natural resources in armed conflict:

^{P.J. KEENAN, "Conflict minerals and the law of pillage", 14} *Chicago J. Int'l L.* 2014, 524–558.
UK MINISTRY OF DEFENCE, *supra* note 13, 67.

violence the primary purpose of which is to spread terror among the civilian population". Two closely related rules are those banning collective punishment and the taking of hostages.¹⁵¹ Israel has repeatedly been accused of engaging in intimidation and collective punishment vis-à-vis the Palestinian territories. Thus, the UN Fact-Finding Mission on Gaza in its 2009 report concluded that Israel's conduct during Operation "Cast Lead" involved collective punishment and "measures of intimidation and terrorism".¹⁵² And in a 2010 press release, the ICRC stated that the blockade imposed on the Gaza strip amounted to a collective punishing of "[t]he whole of Gaza's civilian population [...] for acts for which they bear no responsibility" in clear violation of IHL.¹⁵³ By contrast, for its part, in a judgment of 2014 concerning the demolition of the houses of suspected terrorists and their family members, the Israeli Supreme Court implied that collective punishment can be permissible if there is a sufficiently weighty deterring purpose.¹⁵⁴

Forced deportation¹⁵⁵ constitutes a "'method" of warfare that is of particular historical significance. Following the horrors of the Second World War, the Nuremberg Tribunal defined individual or mass deportations as war crimes and crimes against humanity.¹⁵⁶ Nevertheless, forced deportation was also practiced in more recent conflicts.¹⁵⁷ In 1992 for example, Serbian forces tried to deport hundreds of Bosnians to Austria.¹⁵⁸ The issue of forced deportation is now dealt with in Article 49(1) GC IV¹⁵⁹, though it must be clearly kept in mind that this provision only applies to occupied territory. This provision deals with the prohibition of individual or mass forcible transfers or deportations both of inhabitants of occupied territory outside the occupied territory as well as transfers of parts of the Occupying Power's civilian population into occupied territory. The concept of premeditated forced deportation must be distinguished from (possibly widespread) displacement caused by the general climate of

¹⁵¹ Arts. 33 and 34 GC IV; Art. 75 AP I; Art. 4 AP II.

¹⁵² Report of the UN Fact-Finding Mission on the Gaza Conflict, "Human Rights in Palestine and other Occupied Arab Territories", 25 September 2009, UN Doc. A/HRC/12/48, §§60, 74, 91, 1171, 1320, 1457 & 1494.

¹⁵³ ICRC, "Gaza closure: not another year!", 14 June 2010, available at https://www.icrc.org/eng/ resources/documents/update/palestine-update-140610.htm [accessed on 27 July 2015].

¹⁵⁴ Israeli Supreme Court, *Qawasmeh et al.*, 11 August 2014, HCJ 5290/14, 5295/14, 5300/14.

 ¹⁵⁵ Further, see, e.g., A.M. ABEBE, "Displacement of civilians during armed conflict in the light of the case law of the Eritrea-Ethopia Claims Commission", 22 Leiden J. Int'l L. 2009, 823–851; J. WILMS, "Without Order, anything goes?: The prohibition of forced displacement in non-international armed conflict", 91 Int'l Rev. Red Cross 2009, 547–575.
 ¹⁵⁶ See also Arts 7(1)(d) and 8(2)(a)(vii) ICC Statute

⁵⁶ See also Arts. 7(1)(d) and 8(2)(a)(vii) ICC Statute.

¹⁵⁷ See C. MEINDERSMA, "Legal issues surrounding population transfers in conflict situations", 41 Neth. Int'l L. Rev. 1994, 31–83.

¹⁵⁸ R. GUTMAN, "Deportation", in R. GUTMAN, D.S. RIEFF and K. ANDERSON (eds.), *supra* note 143, 123.

¹⁵⁹ For a detailed analysis, *see* Y. DINSTEIN, *The International Law of Belligerent Occupation*, Cambridge, CUP, 2009, 160–172.

insecurity in armed conflict.¹⁶⁰ It must also be clearly distinguished from the notion of "evacuation". Evacuation is only permitted when the security of the population or imperative military reasons so demand, and on the condition that the evacuees are transferred back to their homes as soon as hostilities in the area have ceased. Article 17 AP II provides for a similarly inspired prohibition of forced movement of civilians in the context of non-international armed conflicts reaching the threshold of applicability of AP II.

¹⁶⁰ See e.g., Independent International Fact-Finding Mission on the Conflict in Georgia, Report, Volume I, §\$120–125.