Chapter 4. The characterization of remote warfare under

international humanitarian law

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INTRODUCTION

This chapter examines the qualification of remote warfare as a form of armed conflict under international humanitarian law. It does so first by considering how armed conflict is defined and how the concept has evolved since the drafting of the Geneva Conventions of 1949. It then focuses on three modes of attack that are commonly associated with remote warfare: the use of remotely piloted vehicles, cyber operations, and autonomous weapon systems. Bearing in mind the challenges that each of these present to the applicability of the law, it will be argued that the concept of armed conflict needs to be interpreted in terms consistent with the object and purpose of international humanitarian law, in accordance with Article 31 of the Vienna Convention on the Law of Treaties.

1. DEFINING 'ARMED CONFLICT'

The most fundamental prerequisite for the applicability of international humanitarian law is the existence of armed conflict. Without armed conflict, this body of law is deprived of the material field for its application. Accordingly, the characterization of the situation as one of armed conflict is of pivotal importance for the protection provided by international humanitarian law. In this section, the concept of armed conflict will be analysed, providing the basis for the qualification of remote warfare under international humanitarian law.

The applicability of international humanitarian law is determined by the terms of Articles 2 and 3 common to the four Geneva Conventions of 1949. Common Article 2 states that the Conventions will apply to 'all cases of declared war or of any other armed conflict which may arise between two or more of the High Contracting Parties, even if the state of war is not recognized by one of them'. Common Article 3 sets out the applicability of a 'minimum' of provisions '[i]n the case of armed conflict not of an international character'. Together, common Articles 2 and 3 define the applicability of the Geneva Conventions to situations of international and non-international armed conflict. The use of the term 'armed conflict' in both provisions was significant. It was the first time that term had been used to define the applicability of a treaty. As noted by the ICRC Commentary on the first Geneva Convention:

It fills the gap left in the earlier Conventions, and deprives the belligerents of the pretexts they might in theory invoke for evasion of their obligations. There is no longer any need for a formal declaration of war, or for recognition of the state of war, as preliminaries to the application of the Convention. The Convention becomes applicable as from the actual opening of hostilities. The existence of armed conflict between two or more Contracting Parties brings it automatically into operation.

It remains to ascertain what is meant by 'armed conflict'. The substitution of this much more general expression for the word 'war' was deliberate. One may argue almost endlessly about the legal definition of 'war'. A State can always pretend, when it commits a hostile act against another State, that it is not making war, but merely engaging in a police action, or acting in legitimate self-defence. The expression 'armed conflict' makes such arguments less easy.¹

In this way, the use of 'armed conflict' in common Articles 2 and 3 avoided issues surrounding the legal characterization of 'war'. The applicability of the law of war

¹ Jean S Pictet (ed), Commentary I Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (ICRC 1952) 32.

² Even so, it still 'remains the case that some States deny the existence of armed conflicts, rendering dialogue difficult on the humanitarian consequences of the conflict and the protection of those affected by it.' International Committee of the Red Cross, *International humanitarian law and the challenges of*

was expanded. With subsequent developments in treaty law, and changes in the nature of armed conflict, the meaning associated with the term has continued to evolve. One of the most significant turning points in this context was the decision of the ICTY Appeals Chamber in the *Tadić* case. In its Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, the Appeals Chamber defined the concept of armed conflict as follows:

[A]n armed conflict exists whenever there is a resort to armed force between States or protracted armed violence between governmental authorities and organized armed groups or between such groups within a State. International humanitarian law applies from the initiation of such armed conflicts and extends beyond the cessation of hostilities until a general conclusion of peace is reached; or, in the case of internal conflicts, a peaceful settlement is achieved.³

This definition of armed conflict filled a lacuna that had previously existed in the law. The Geneva Conventions of 1949 did not include a definition of armed conflict. Although definitions were included in the additional protocols of 1977, 4 these definitions referred to specific categories of armed conflict; they did not address the conditions required for the application of international humanitarian law more generally in situations of international or non-international armed conflict. The concept of armed conflict propounded by the ICTY thus embodied a very significant development of the law. Sonja Boelaert-Suominen commented on its significance as follows:

contemporary armed conflicts, 32nd International Conference of the Red Cross and Red Crescent, 32IC/15/11, October 2015, 7.

³ Prosecutor v Tadić, Decision on the Defence Motion for Interlocutory Appeal on Jurisdiction, 2 October 1995, ICTY Case No. IT-94-1-AR72, para 70. For discussion of the definition provided by the Tadić Appeals Chamber see: Anthony Cullen, The Concept of Non-International Armed Conflict in International Humanitarian Law (Cambridge University Press 2010) 115–58.

⁴ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Additional Protocol I), 1125 UNTS 3, 1977, Article 1(4); and Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 1125 UNTS 609, 1977, Article 1.

The seemingly innocuous description by the Appeals Chamber of what constitutes an armed conflict was innovative in various respects. First, it covers a variety of hypotheses and caters explicitly for conflicts between non-state entities. Second, whilst it sets a low threshold for the application of humanitarian law in general, it is particularly important for its consequences in relation to internal armed conflicts. The definition of armed conflict suggested by the Appeals Chamber covers not only the classic examples of (a) an armed conflict between two or more states and (b) a civil war between a state on the one hand, and a non-state entity on the other. It clearly encompasses a third situation, (c) an armed conflict in which no government party is involved, because two or more non-state entities are fighting each other.⁵

The *Tadić* definition, included in obiter and credited to the presiding judge Antonio Cassese, ⁶ has become one of the most authoritative points of reference in the characterization of armed conflict under international humanitarian in law. ⁷ In doing so, it has broadened the applicability of the Geneva Conventions beyond the conditions considered by the drafters of these treaties in 1949. Nevertheless, it preserves the distinction introduced by the Geneva Conventions between international armed conflict (under common Article 2) and non-international armed conflict (under common Article 3). ⁸ The section that follows considers the relevance of the concept to the practice of remote warfare.

⁵ Sonja Boelaert-Suominen, 'The Yugoslav Tribunal and the Common Core of Humanitarian Law Applicable to All Armed Conflicts' (2000) 13 Leiden Journal of International Law 619 at 632–3. According to Christopher Greenwood,

The definitions of international and internal armed conflict are of considerable importance. Neither term is defined in the Geneva Conventions or other applicable agreements. Whereas there is an extensive literature on the definition of 'war' in international law, armed conflict has always been considered a purely factual notion and there have been few attempts to define or even describe it.

Christopher Greenwood, 'The Development of International Law by the International Criminal Tribunal for the Former Yugoslavia' (1998) 2 Max Planck Yearbook of United Nations Law 97 at 114.

⁶ Peter Rowe, 'The International Criminal Tribunal for Yugoslavia: The Decision of the Appeals Chamber on the Interlocutory Appeal on Jurisdiction in the *Tadic* Case' (1996) 45 International and Comparative Law Quarterly 691 at 697.

⁷ See generally: Anthony Cullen, *The Concept of Non-International Armed Conflict in International Humanitarian Law* (Cambridge University Press 2010) 117–58.

⁸ As noted by Lindsay Moir, '[t]he characterization of an armed conflict as being either international or non-international in nature remains a vital exercise for determining the applicability of different rules

THE CHARACTERIZATION OF REMOTE WARFARE UNDER THE LAW OF ARMED CONFLICT

As illustrated in the introductory chapter to this volume, remote warfare has existed from time immemorial. In terms of legal regulation, the challenge has been one of responding to changes in the actual conduct of armed conflict. This section focuses on changes arising from three new categories of weapons: remotely piloted vehicles (drones), cyber weapons; and autonomous weapon systems. In doing so, it will consider the impact of each for the characterization of armed conflict under international humanitarian law.

Remotely Piloted Vehicles (Drones)

The use of drones for the targeted killing of suspected terrorists has been a subject considerable debate among scholars of international law, in particular since the killing of Qaed Salim Sinan al-Harethi in November 2002. Feeding this debate has been discussions concerning the ethical, humanitarian and legal implications of US foreign policy. For scholars, activists and professionals in the field of international

of IHL.' Lindsay Moir, 'The Concept of Non-International Armed Conflict' in Andrew Clapham, Paola Gaeta and Marco Sassòli (eds), *The Geneva Conventions: A Commentary* (Oxford University Press 2015) 391–414, 414.

⁹ Qaed Salim Sinan al-Harethi was killed by the CIA in Yemen using an unmanned Predator drone on 3 November 2002. See Chris Downes, "'Targeted Killings" in an Age of Terror: The Legality of the Yemen Strike' (2004) 9 Journal of Conflict and Security Law 277–94; A P V Rogers, *Law on the Battlefield* (Oxford University Press 2013) 50–1; Noam Lubell, 'The War (?) against Al-Qaeda' in Elizabeth Wilmshurst (ed), *International Law and the Classification of Conflicts* (Oxford University Press 2012) 450.

¹⁰ See: Claire Finkelstein, Jens David Ohlin, and Andrew Altman, Targeted Killings: Law and Morality in an Asymmetrical World (Oxford University Press, 2012); Bradley Jay Strawser (ed), Killing by Remote Control: The Ethics of an Unmanned Military (Oxford University Press 2013); Dan Saxon, International Humanitarian Law and the Changing Technology of War (Brill, 2013); Sikander Ahmed Shah, International Law and Drone Strikes in Pakistan: The Legal and Socio-political Aspects (Routledge, 2014); James DeShaw Rae, Analyzing the Drone Debates: Targeted Killings, Remote Warfare, and Military Technology (Palgrave Macmillan, 2014); Sarah Knuckey (ed), Drones and Targeted Killings: Ethics, Law, Politics (International Debate Education Association 2014); Steven Barela (ed), Legitimacy and Drones: Investigating the Legality, Morality and Efficacy of UCAVs (Ashgate, 2015); Aleš Završnik, Drones and Unmanned Aerial Systems: Legal and Social Implications for Security and Surveillance (Springer International Publishing, 2015); Jammel Jaffer (ed), The Drone Memos: Targeted Killing, Secrecy, and the Law (New Press, 2016); and Bart Custers (ed), The Future

humanitarian law, a significant part of the debate concerning the use of such weapons has centred on the context for their use and the characterization of this context as one of 'armed conflict'. In the absence of the conditions described in *Tadić*, questions have been raised concerning the lawfulness of attacks undertaken remotely using such weapons and the applicability of international humanitarian law. The significance of characterizing the context as one of armed conflict was highlighted in the *Study on Targeted Killings* authored by the UN Special Rapporteur on extrajudicial, summary or arbitrary executions, Philip Alston:

Outside the context of armed conflict, the use of drones for targeted killing is almost never likely to be legal. A targeted drone killing in a State's own territory, over which the State has control, would be very unlikely to meet human rights law limitations on the use of lethal force.¹¹

The position adopted by the government of the United States has been a starting point for many discussions on the applicability of international humanitarian law to drone warfare. The position of the United States is that since 11 September 2001 it has been engaged in an armed conflict with 'al-Qaida and associated forces'. Although references to a 'war on terror' were avoided under the Obama administration, there was continuity with the Bush administration in the policy adopted regarding the characterization of the campaign as one of armed conflict. A statement of this position was provided in 2012 by John Brennan, then a Legal Advisor to President Obama:

As the President has said many times, we are at war with al-Qa'ida ... Our ongoing armed conflict with al-Qa'ida stems from our right—recognized under international law—to self defense.

of Drone Use: Opportunities and Threats from Ethical and Legal Perspectives (Information Technology and Law Series, Springer, 2016).

¹¹ UN Special Rapporteur on Extrajudicial, Summary or Arbitrary Executions, Study on Targeted Killings, UN Doc A/HRC/14/24/Add.6, 28 May 2010, para 85. For a discussion of the US position on this point, see: Max Brookman-Byrne, 'Drone Use 'Outside Areas of Active Hostilities': An Examination of the Legal Paradigms Governing US Covert Remote Strikes' (2017) 64 *Netherlands International Law Review 3*.

An area in which there is some disagreement is the geographic scope of the conflict. The United States does not view our authority to use military force against al-Qa'ida as being restricted solely to 'hot' battlefields like Afghanistan. Because we are engaged in an armed conflict with al-Qa'ida, the United States takes the legal position that—in accordance with international law—we have the authority to take action against al-Qa'ida and its associated forces without doing a separate self-defense analysis each time. And as President Obama has stated on numerous occasions, we reserve the right to take unilateral action if or when other governments are unwilling or unable to take the necessary actions themselves.

Brennan's statement, like others issued by representatives of the Obama administration, ¹² conflates the law of armed conflict with the right of self-defense. In terms of scope, the campaign is open-ended. Although Obama distanced himself from the idea of perpetual war, the duration of the campaign against al-Qa'ida and associated forces is one that is not limited by the timeframe of a US government administration. When asked during a Senate hearing in 2013 about the anticipated duration of the campaign, the Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict, Michael Sheehan answered 'at least 10 to 20 years'. ¹³ This appears to suggest no predetermined limit to the duration of the campaign.

With regard to the geographic scope of the campaign, it is generally accepted that international humanitarian law applies to the theatre of hostilities, to places where prisoners of war are detained and to areas under the control of a party to the conflict. However, as Brennan mentioned in his statement, the United States does not view its campaign as being confined to 'hot' battlefields like the ones in Afghanistan. The

¹² For collection of relevant US legal and policy documents (including John Brennan's statement), see: Jammel Jaffer (ed), *The Drone Memos: Targeted Killing, Secrecy, and the Law* (New Press, 2016).

¹³ See: Glenn Greenwald, 'Washington gets explicit: its "war on terror" is permanent', *The Guardian*, 17 May 2013, accessed 4 June 2017 at https://www.theguardian.com/commentisfree/2013/may/17/endless-war-on-terror-obama. See also: Spencer Ackerman, 'Pentagon Spec Ops Chief Sees '10 to 20' More Years of War Against al-Qaida', *Wired*, 16 May 2013, accessed 4 June 2017 at https://www.wired.com/2013/05/decades-of-war/

campaign crosses many national boundaries: Besides Afghanistan, attacks have been reported in Yemen, Somalia, Pakistan, Iraq, Mali and Libya.

When attacks using drones are undertaken in the context of a pre-existing local armed conflict—whether international or non-international in nature—it is undoubtable that international humanitarian law would apply to these operations. The situation is less clear where there is no pre-existing armed conflict and no consent for the use of UAVs against suspects terrorists from the authorities of the state in which the attack takes place. According to the US position, the 'armed conflict' is one that is global; it is one that follows wherever the use of lethal force is authorized by the US government, the exercise of which is justified on a continuing basis of self-defense.

In addition to targeting 'al-Qa'ida and its associated forces', the approach adopted by the United States has also been extended to the Islamic State (ISIS). In remarks made at the US-ASEAN Press Conference on 16 February 2016, President Obama stated: 'I have been clear from the outset that we will go after ISIS wherever it appears, the same way that we went after al Qaeda wherever they appeared.' This position on the extraterritorial use of lethal force has attracted expressions of concern from various quarters. When questioned by the chair of the UK Parliament's Joint Committee on Human Rights, the UK Secretary for Defence, Michael Fallon, acknowledged differences between the position of the United States and that of the

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¹⁴ Office of the White House Press Secretary, Remarks by President Obama at U.S.-ASEAN Press Conference, February 16, 2016, accessed 4 June 2017 at https://www.whitehouse.gov/the-press-office/2016/02/16/remarks-president-obama-us-asean-press-conference.

¹⁵ For example, see: Amnesty International, 'Doctrine of pervasive 'war' continues to undermine human rights: A reflection on the ninth anniversary of the AUMF', AI Index: AMR 51/085/2010, 15 September 2010, 2; Human Rights Watch, Letter to President Obama: Targeted Killings by the US Government, 16 December 2011, accessed 4 June 2017 at https://www.hrw.org/news/2011/12/16/letter-president-obama-targeted-killings-us-government; UN News Centre, 'UN independent expert voices concerns over the practice of targeted killings', 2 June 2010, accessed 4 June 2017 at goo.gl/yysKob; or UN News Centre, 'UN human rights expert questions targeted killings and use of lethal force', 20 October 2011, accessed 4 June 2017 at goo.gl/a5K3wC.

United Kingdom. With regard to the characterization of the campaign as a noninternational armed conflict, Fallon stated:

It is for the Americans to defend or describe their own definition. We would consider on a case-by-case basis, where there is an armed conflict between government authorities and various organised armed groups, and we would look at various factors case-by-case ... such as the duration or intensity of the fighting.¹⁶

Recognizing differences in the legal positions of the United States and United Kingdom on the extraterritorial use of lethal force, the Joint Parliamentary Committee on Human Rights emphasized the urgent need for greater clarity from the government of the United Kingdom:

The UK's support for this use of lethal force abroad by the US demonstrates the urgent need for the Government to clarify its understanding of the legal basis for the UK's policy. The US policy, in short, is that it is in a global armed conflict with ISIL/Da'esh, as it has been since 9/11 with al-Qaida, which entitles it to use lethal force against it 'wherever they appear.' On this view, the Law of War applies to any such use of force against ISIL/Da'esh, wherever they may be. This is not, however, the position of the UK Government. As the Defence Secretary made clear in his evidence to us, the Government considers itself to be in armed conflict with ISIL/Da'esh only in Iraq and Syria.¹⁷

It is noteworthy in this context that the position adopted by the United States on characterization of its campaign departs from prevailing views of what armed conflict consists of. The International Committee of the Red Cross, an organization regarded as the 'guardian of international humanitarian law', has stated that it 'does not share the view that a conflict of global dimensions is or has been taking place'. ¹⁸ Consistent

¹⁶ UK Parliament Joint Committee on Human Rights, Oral evidence: The UK Government's policy on the use of drones for targeted killing, HC 574, Wednesday, 16 December 2015, 3.

¹⁷ UK Parliament Joint Committee on Human Rights, The Government's policy on the use of drones for targeted killing: Second Report of Session 2015–16, HC 574, HL Paper 141, 10 May 2016, 58.

¹⁸ ICRC, *International Humanitarian Law and the challenges of contemporary armed conflicts*, 31st International Conference of the Red Cross and Red Crescent, 31IC/11/5.1.2, October 2011, 10. See also: Amnesty International, 'Doctrine of pervasive 'war' continues to undermine human rights: A reflection on the ninth anniversary of the AUMF', AI Index: AMR 51/085/2010, 15 September 2010, 2. ('[T]here is no place in international humanitarian and human rights law for a legal category of global

with the approach developed in the jurisprudence of the ICTY, the position of the ICRC is that the applicability of international humanitarian law is triggered by 'violence [reaching] the threshold of armed conflict, whether international or non-international'. Accordingly, the characterization of a situation as one of armed conflict is to be determined on a case-by-case basis:

[E]ach situation of organized armed violence must be examined in the specific context in which it takes place and must be legally qualified as armed conflict, or not, based on the factual circumstances. The law of war was tailored for situations of armed conflict, both from a practical and a legal standpoint. One should always remember that IHL rules on what constitutes the lawful taking of life or on detention in international armed conflicts, for example, allow for more flexibility than the rules applicable in non-armed conflicts governed by other bodies of law, such as human rights law. In other words, it is both dangerous and unnecessary, in practical terms, to apply IHL to situations that do not amount to war.²⁰

For Professor Christine Gray, '[i]t is the substantive law that is crucial, and it is here that the USA's position is weakest'. ²¹ Although armed conflict has evolved considerably since the drafting of the Geneva Conventions of 1949, the concept still possesses temporal and geographic scope. In failing to take this into account, the

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and pervasive but non-international armed conflict, suspending the ordinary rule of law and human rights whenever and wherever an individual state deems necessary, as distinct from a series of specific geographic zones of international or non-international armed conflict.') For a contrary view, see: Noam Lubell, 'Fragmented Wars: Multi-Territorial Military Operations against Armed Groups' (2017) 93 *International Law Studies* 215 at 245.

¹⁹ ICRC, *International Humanitarian Law and the challenges of contemporary armed conflicts*, 30th International Conference of the Red Cross and Red Crescent, 30IC/07/8.4,October 2007, 7.

²⁰ ICRC, *International Humanitarian Law and the challenges of contemporary armed conflicts*, 30th International Conference of the Red Cross and Red Crescent, 30IC/07/8.4,October 2007, 8. On the applicability of international humanitarian law to drones, see the reports of UN Special Rapporteurs, Philip Alston, Ben Emmerson and Christof Heynes: Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, Philip Alston, Study on Targeted Killings, UN Doc A/HRC/14/24/Add.6, 28 May 2010; Report of the Special Rapporteur on the promotion and protection of human rights and fundamental freedoms while countering terrorism, Ben Emmerson, UN Doc A/68/389, 18 September 2013; Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, Christof Heyns, UN Doc A/68/382, 13 September 2013; Report of the Special Rapporteur on the promotion and protection of human rights and fundamental freedoms while countering terrorism, Ben Emmerson, UN Doc A/HRC/25/59, 11 March 2014.

²¹ Christine Gray, 'Targeted Killings: Recent US Attempts to Create a Legal Framework' (2013) 66 Current Legal Problems 75–106, 106.

position adopted by the United States blurs the distinction between peace and war. As noted by Christof Heyns, '[t]he danger is one of a global war without borders'.²² It also 'raises the question why other States should not engage in the same practices'.²³ Ultimately, as noted by the Netherlands Advisory Committee on Issues of Public International Law, to avoid:

setting precedents that could be used by other states or entities in the fairly near future, it is vital that the existing international legal framework for the deployment of such a weapons system be consistently and strictly complied with. States need to be as clear as possible about the legal bases invoked when deploying armed drones.²⁴

For the use of drones to be lawful as a form of remote warfare, the context must be one of armed conflict. The absence of clarity concerning the characterization of situations as such is detrimental not only to applicable legal regimes but also for the maintenance of international peace and security. The concern has also been raised that 'the use of armed drones for killings in remote places with little or no risk to one's own forces raises the issue of lowering the threshold to the point of trivialising such interventions and of accountability for the actual outcome of each strike'. ²⁵ Considering the continued growth in the deployment of armed drones, and the frequently transnational nature of their use, it is arguable that more attention would be useful at an international level to strengthen compliance with the law. Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne and Thompson Chengeta contend that:

²² UN News Centre, 'UN human rights expert questions targeted killings and use of lethal force', 20 October 2011, accessed 4 June 2017 at goo.gl/a5K3wC.

²³ Ibid

²⁴ Advisory Committee on Issues of Public International Law (CAVV), *Advisory Report on Armed Drones*, Advisory Report No. 23, The Hague, July 2013, 27–8.

²⁵ Arcadio Díaz Tejera, 'Drones and targeted killings: the need to uphold human rights and international law', a report issued to Committee on Legal Affairs and Human Rights of the Parliamentary Assembly of the Council of Europe, Doc. 13731, 16 March 2015, para 61.

There is an urgent need for the international community to gain greater consensus on the interpretation of the constraints that international law in all its manifestations places on the use of drones. This is important not only because of the implications for those who currently find themselves on the receiving end of drones, but in order to keep a viable and strong system of international security intact. A central component of such a security system is the rule of law. Drones should follow the law, not the other way around. ²⁶

As the context for the use of armed drones determines the applicability of international humanitarian law, so it is with other forms of remote warfare. The section that follows examines cyber operations and explores issues surrounding the characterization of such as a form of armed conflict.

Cyber Operations

In its 2015 report *International humanitarian law and the challenges of contemporary armed conflicts*, the International Committee of the Red Cross defined 'cyber warfare' as 'operations against a computer or a computer system through a data stream, when used as means and methods of warfare in the context of an armed conflict, as defined under IHL'. ²⁷ According to the *Tallinn Manual on the International Law Applicable to Cyber Warfare*: 'A cyber attack is a cyber operation, whether offensive or defensive, that is reasonably expected to cause injury or death to persons or damage or destruction to objects.' ²⁸ Although consensus has yet to emerge on the

²⁶ Written evidence from Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne and Thompson Chengeta (DRO0024), 'The Right to Life and the International Law Framework Regulating the Use of Armed Drones in Armed Conflict or Counter-Terrorism Operations', 10 December 2015, 46. See: Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne and Thompson Chengeta, 'The right to life and the international law framework regulating the use of armed drones' (2016) 65 *International and Comparative Law Quarterly* 791 at 826. See also: Summary of the Human Rights Council interactive panel discussion of experts on the use of remotely piloted aircraft or armed drones in compliance with international law: Report of the Office of the United Nations High Commissioner for Human Rights, UN Doc A/HRC/28/38, 15 December 2014, para 56.

²⁷ ICRC, *International humanitarian law and the challenges of contemporary armed conflicts*, Doc. 32IC/15/11, Geneva, October 2015, 39.

²⁸ Michael N Schmitt (ed), *Tallinn Manual on the International Law Applicable to Cyber Warfare* (Cambridge University Press, 2013) 106. See also Michael N Schmitt, 'Classification in Future Conflict' in Elizabeth Wilmshurst (ed), *International Law and the Classification of Conflicts* (Oxford University Press, 2012) 455–77, 461 ('Intuitively, it seems that the determinative criterion must be

characterization of cyber warfare, as a weapon employed in the context of armed conflict the applicability of international humanitarian law to cyber operations is beyond doubt. According to Gary Solis:

If there is a circumstance in armed conflict that was unforeseen (and unforeseeable) by the 1949 Geneva Conventions, it is cyber warfare. Still, cyber warfare can be dealt with using traditional law of war tools, recognizing that today's jus ad bellum cyber war questions can instantly ripen into jus in bello issues. Cyber attacks are not per se LOAC violations. They are another strategy or tactic of warfare ... When considering their effect or use, they may be thought of as being similar to kinetic weapons.²⁹

As noted by William Boothby, '[t]he law of armed conflict contains no ad hoc rules that ... permit, prohibit, or restrict the lawful circumstances of use of cyber weapons as such'. ³⁰ However, it is clear that cyber weapons are to be governed by the same rules that regulate the use of weapons more generally under international humanitarian law. Principles of distinction, proportionality and military necessity would apply to attacks undertaken by way of cyber operations. As a form of remote warfare, cyber operations must comply with the relevant rules of international humanitarian law, including prohibitions on indiscriminate attacks or attacks likely to cause superfluous injury or unnecessary suffering. The issue of ensuring compliance with such rules is, however, thwarted by the secretive nature of cyber operations, the lack of transparency under which attacks are undertaken and the absence of a treaty specifically concerned with the regulation of cyberwarfare. Solis comments that:

Defining many aspects of cyber warfare is problematic because there is no multinational treaty directly dealing with cyber warfare. That is because, so far, many aspects of cyber war are not agreed upon. The

consequence severity. Death, injury, damage or destruction clearly qualify an action as armed conflict, while inconvenience and irritation do not. But beyond that, the law is uncertain.')

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²⁹ Gary Solis, *The Law of Armed Conflict: International Humanitarian Law in War* (Cambridge University Press 2016) 702.

³⁰ William H Boothby, Weapons and the Law of Armed Conflict (Oxford University Press 2016) 241.

law of war, as well as customary international law, lacks cyber-specific norms, and state practice interpreting applicable norms is slow to evolve.³¹

As a form of remote warfare, there are many issues which impact on the characterization of cyber operations as armed conflict under international humanitarian law. Questions concerning the attribution of attacks, the nature of operations required for the threshold of cyber warfare, and the classification of armed conflicts initiated in this way, all pose challenges to ensuring compliance and prompt calls for the further development of the law. The section that follows explores another form of remote warfare which has similarly prompted calls for the development of international humanitarian law, to regulate a method of warfare not anticipated by the drafters of the Geneva Conventions of 1949.

Autonomous Weapon Systems

While the use of drones and cyber operations present their own distinct challenges to the conceptual basis for the characterization of armed conflict, the use of autonomous weapon systems has been described as a potential 'paradigm shift'. ³² Autonomous Weapon Systems (AWS), also referred to as Lethal Autonomous Weapon Systems (LAWS), have been defined by the ICRC as '[a]ny weapon system with autonomy in its critical functions. That is, a weapon system that can select (i.e. search for or detect, identify, track, select) and attack (i.e. use force against, neutralize, damage or destroy) targets without human intervention'. ³³ However, as noted by Michael W Meier, the

³¹ Solis (n 29) 673–4.

³² Jakob Kellenberger, 'Keynote address' in Wolff Heintschel von Heinegg (ed), *International Humanitarian Law and New Weapon Technologies*, 34th Round Table on Current Issues of International Humanitarian Law, 8–10 September 2011 (International Institute of Humanitarian Law 2012) 23–7, 27; and Robin Geiß, *The International-Law Dimension of Autonomous Weapons Systems* (Friedrich-Ebert-Stiftung, International Policy Analysis 2015) 3.

³³ ICRC, 'Views of the International Committee of the Red Cross (ICRC) on autonomous weapon system', Convention on Certain Conventional Weapons (CCW) Meeting of Experts on Lethal Autonomous Weapons Systems (LAWS), 11–15 April 2016, Geneva, 11 April 2016, 1.

US government representative at third CCW Meeting of Experts on LAWS in April 2016, 'views on what would constitute LAWS have varied greatly'.³⁴

In terms of legal regulation, much of the debate has centred on the degree of 'autonomy' exercised in the use of lethal force.³⁵ In the absence of meaningful human control, questions have been raised as to whether compliance with international humanitarian law would actually be possible with Autonomous Weapon Systems. This was reflected in the report of the 2016 Convention on Conventional Weapons (CCW) meeting of experts that took place at the United Nations in Geneva from 11 to 15 April 2016. The report submitted by the chairperson, Ambassador Michael Biontino of Germany, states:

- 44. It was of common understanding that, as with all weapon systems, the rules of IHL are fully applicable to LAWS. However, many delegations questioned whether weapons systems that select and attack targets autonomously would be able to comply with these rules.
- 45. A number of delegations argued that human judgment was necessary in order to assess the fundamental principles of proportionality, distinction and precautions in attack. For this reason, it was recognized that a human operator should always be involved in the application of force. Many delegations questioned if it would be possible to programme a legal assessment into a machine prior to its deployment. Given the rapidly changing circumstances in a conflict, it would be difficult to conceive of a LAWS distinguishing between lawful and unlawful targets. For example, it was unclear as to how LAWS could be programmed to recognize the surrender of a combatant or take feasible precautions in attack. Additionally, it was

April 2016, 2. The following definition of 'autonomous weapon system' has been used by the US Department of Defense: 'A weapon system that, once activated, can select and engage targets without further intervention by a human operator. This includes human-supervised autonomous weapon systems that are designed to allow human operators to override operation of the weapon system, but can select and engage targets without further human input after activation.' Department of Defense Directive 3000.09, Autonomy in Weapon Systems, 21 November 2012, 13–14.

³⁴ Michael W Meier, US Delegation Opening Statement, The Convention on Certain Conventional Weapons (CCW) Informal Meeting of Experts on Lethal Autonomous Weapons Systems, Geneva, 11 April 2016, 2. The following definition of 'autonomous weapon system' has been used by the US

³⁵ For a discussion of the different aspects of autonomy, see Tim McFarland, 'Factors shaping the legal implications of increasingly autonomous military systems' (2015) *International Review of the Red Cross* 1. See also: Duncan Hollis, 'Setting the Stage: Autonomous Legal Reasoning in International Humanitarian Law' (2016) 30 *Temple International and Comparative Law Journal* 1.

noted that a potential target may alter its behaviour in order to deliberately confuse assessments made by a machine.³⁶

The report of the CCW expert meeting states that: 'Most delegations maintained that machines are simply incapable of executing legal judgements as required by IHL, especially in complex and cluttered environments typical in conflict scenarios.'³⁷ In addition to the absence of meaningful human control in the selection and attack of targets, significant issues of accountability are raised by the use of Autonomous Weapons Systems. Given the technology's state of development, it is currently not clear how the doctrine of command responsibility would apply to attacks undertaken using such weapons. This was also reflected in discussions at the CCW expert meeting:

Accountability was highlighted as a central element of IHL. Doubts were raised over whether the required standards of accountability and responsibility for the use of force and its effects could be upheld with the deployment of LAWS. In the case of an incident involving LAWS, it was uncertain as to who would be held accountable within the chain of command or responsibility, such as the commander, programmer, or operator. As a result, it was argued by some that legal grey zones could emerge, which in turn might be deliberately exploited and foster impunity. Others noted that this would not be the case, but that evidentiary issues may arise. It was proposed that there should be a requirement for LAWS to keep records of their operations. Other delegations responded that, if LAWS can be used in compliance with IHL, there would not be an accountability gap as any issues could be addressed under international criminal law and the law of State responsibility.³⁸

³⁶ CCW, Report of the 2016 Informal Meeting of Experts on Lethal Autonomous Weapons Systems (LAWS), Geneva, 11–15 April 2016, paras 44–45, accessed 4 June 2017 at goo.gl/Sy0y8W.

³⁷ CCW, Report of the 2016 Informal Meeting of Experts (n 36), para 46. See also: Statement of the International Committee of the Red Cross (ICRC), Convention on Certain Conventional Weapons (CCW) Meeting of Experts on Lethal Autonomous Weapons Systems (LAWS), 13–16 May 2014, Geneva, 13 April 2015, 3. ('Based on current and foreseeable technology, there are serious doubts about the ability of autonomous weapon systems to comply with IHL in all but the narrowest of scenarios and the simplest of environments. In this respect, it seems evident that overall human control over the selection of targets and use of force against them will continue to be required.')

³⁸ CCW, Report of the 2016 Informal Meeting of Experts (n 36), para 52.

In light of the above, it was recommended that further consideration be given to the question of 'legal and political responsibility and accountability'. ³⁹

With regard to the applicability of international humanitarian law, concerns have been expressed that autonomous weapon systems may lower the threshold required for the qualification of a situation as one of armed conflict. ⁴⁰ In addition, the absence of human participation poses a challenge as to how the parties to armed conflicts are to be characterized. When two sides engage in hostilities through the use of autonomous weapons systems and there is no direct human participation in the conflict from either side, does the law of armed conflict apply? In other words, is it possible to qualify a situation as one of armed conflict if none of the parties directly engaged in hostilities are human beings? The answer to this question is arguably best addressed by considering rules relating to the interpretation of international humanitarian law under customary international law and the Vienna Convention on the Law of Treaties. The section that follows will explore how such rules could be potentially applied to autonomous weapons systems and to the other forms of remote warfare discussed above.

RESPONDING TO THE CHANGING NATURE OF ARMED CONFLICT

Hersch Lauterpacht commented in the 1950s that 'if international law is, in some ways, at the vanishing point of law, the law of war is, perhaps even more conspicuously, at the vanishing point of international law'. 41 If the law of armed

³⁹ CCW, Recommendations to the 2016 Review Conference, 11–15 April 2016, 2, accessed 4 June 2017 at goo.gl/qDdGgS.

⁴⁰ ICRC, Report of the Expert Meeting on Autonomous Weapon Systems: Technical, Military, Legal and Humanitarian Aspects, Geneva, 26–28 March 2014 (ICRC 2014), 17–18; Geiß (n 32) 23. It was recommended the 'effects on the threshold for armed conflicts' be given further consideration by the 2016 CCW meeting of experts: Recommendations to the 2016 Review Conference, (n 39) 2.

⁴¹ Hersch Lauterpacht, 'The Problem of the Revision of the Law of War' (1952) 29 British Yearbook of International Law 360–82, 382.

conflict has a vanishing point in the 21st century, it is arguably that of remote warfare. The challenges posed by drones, cyber operations and autonomous weapons systems to the applicability of international humanitarian law go well beyond the conditions of warfare contemplated by the drafters of the Geneva Conventions of 1949. On account of this, it is essential to consider rules that govern the interpretation of such treaties. As mentioned above, the concepts of international and non-international armed conflict are linked to Articles 2 and 3 common to the four Geneva Conventions. If international humanitarian law is to be deemed applicable to the different forms of remote warfare, it must be interpreted in terms consistent with the scope of these provisions. In this context, reference must be made to the terms of Article 31(1) of the Vienna Convention on the Law of Treaties which states the following general rule of interpretation:

A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.⁴²

The status of this rule as customary international law has been confirmed in a number of cases before the International Court of Justice, including the *La Grand* case (*Germany v the United States*) in 2001,⁴³ the *Wall* Advisory Opinion in 2004,⁴⁴ and the case concerning the *Application of the Genocide Convention (Bosnia and Herzegovina v. Serbia and Montenegro)* in 2007.⁴⁵ The significance of a treaty's 'object and purpose' is underscored by the fact that the term is used eight times in the

⁴² Vienna Convention on the Law of Treaties, 1155 UNTS 331, 8 ILM 679, entered into force 27 January 1980.

⁴³ LaGrand case (Germany v United States of America), Judgment of 27 June 2001, ICJ Reports 2001, 501, para 99.

⁴⁴ Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion of 9 July 2004, ICJ Reports 2004, 174, para 94.

⁴⁵ Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v Serbia and Montenegro), Judgment of 26 February 2007, ICJ Reports 2007, 110, para 160.

Vienna Convention. 46 For applicability of international humanitarian law, the 'object and purpose' of the Geneva Conventions and the Additional Protocols thereto is of pivotal importance to the interpretation of what 'armed conflict' consists of. This leads to the question as to how the object and purpose of these treaties should be characterized. The ILC Guide to Practice on Reservations to Treaties describes the approach adopted by the International Court of Justice:

[T]he International Court of Justice has deduced the object and purpose of a treaty from a number of highly disparate elements, taken individually or in combination:

- From its title;
- From its preamble;
- From an article placed at the beginning of the treaty that 'must be regarded as fixing an objective, in the light of which the other treaty provisions are to be interpreted and applied';
- From an article of the treaty that demonstrates 'the major concern of each contracting party' when it concluded the treaty;
- From the preparatory works on the treaty; and
- From its overall framework.⁴⁷

Applying these elements to the Geneva Conventions of 1949 and their Additional Protocols, the object and purpose of international humanitarian law may be characterized as the protection of victims of armed conflicts. While the titles of the Geneva Conventions specify different categories of protected persons, collectively they have been referred to as 'International Conventions for the Protection of War Victims'.⁴⁸ The title of Additional Protocol I refers to 'the Protection of Victims of

⁴⁶ The 'object and purpose' of a treaty is of relevance not only for its interpretation but also with regard to obligations that exist prior to the entry into force of the treaty (Article 18), reservations (Article 19(c) and Article 20(2)), modifications (Article 41(1)(b)(ii)), and the possibility of suspending operation of the treaty (Article 58(1)(b)(ii)).

⁴⁷ Report of the International Law Commission: Sixty-third session (26 April–3 June and 4 July–12 August 2011), UN Doc A/66/10/Add.1 (United Nations 2011) 360–1.

⁴⁸ Final Record of the Diplomatic Conference of Geneva (Federal Political Department 1949), Vol I, 5.

International Armed Conflicts', while the title of Additional Protocol II refers to 'the Protection of Victims of Non-International Armed Conflicts'. ⁴⁹ The preamble of Additional Protocol I states the belief of High Contracting Parties that it is necessary to 'reaffirm and develop the provisions protecting the victims of armed conflicts and to supplement measures intended to reinforce their application', while the preamble of Additional Protocol II emphasizes 'the need to ensure a better protection for the victims of [non-international] armed conflicts'. The terms of these provisions are significant in that they set the *context* for the interpretation of operative provisions.

The article 'placed at the beginning' of each of the four Geneva Conventions (Article 1) states: 'The High Contracting Parties undertake to respect and to ensure respect for the present Convention in all circumstances.' Taken together with the titles (both individual and collective), the provision reinforces the overall framework of each treaty for protection of victims of armed conflict. The *travaux préparatoire* is also consistent with this, reflected in the positions expressed by States involved in drafting process. For example, the Mexican Ambassador at the 1949 Diplomatic Conference stated: 'This Conference was convened to examine the problem of protecting war victims. Each of our four working documents [that is the draft Conventions] has its own individual character; but they all have the same purpose – the protection of victims of war.' 50

Proceeding from the premise that the object and purpose of international humanitarian law is to further the protection of the victims of armed conflict, how

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⁴⁹ Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts (Additional Protocol I), 1125 UNTS 3, 1977; Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II), 1125 UNTS 609, 1977.

⁵⁰ Final Record of the Diplomatic Conference of Geneva of 1949 (Federal Political Department 1949), Vol 2-B, 332–3.

does this impact on the characterization of remote warfare? This question is arguably best addressed on a case-by-case basis by considering how the applicability of international humanitarian law is consistent with its object and purpose. For example, while the characterization of the campaign against 'al-Qa'ida and its associated forces' as a non-international armed conflict provides a context for the use of lethal force, it is not clear how it serves to realize the protection provided by the law. On the contrary, the potential exists for such a characterization—not limited by time or geography—to undermine rather than strengthen the protection provided, creating 'global war without borders, in which no one is safe'.⁵¹

If the concept of armed conflict is to be interpreted to accommodate new forms of warfare, this development must be consistent with the object and purpose of international humanitarian law. If not, then the integrity of the law and its utility in situations of armed conflict will be undermined. As noted in the conclusions of an Expert Panel convened in 2014 on the use of remotely piloted aircraft or armed drones:

The starting point of any legal analysis on armed drones should be existing international law, in particular the prohibition against the arbitrary deprivation of life. Modifying well-established rules of international law to accommodate the use of drones might have the unintended long-term consequence of weakening those rules. The existing legal framework was sufficient and did not need to be adapted to the use of drones, rather, it was the use of armed drones that must comply with international law. ⁵²

With regard to cyber warfare, the issue of characterization is complicated by the lack of consensus on how it is to be defined, problems of attribution and the absence of an international agreement clarifying the applicability of international humanitarian law

⁵¹ UN News Centre, 'UN human rights expert questions targeted killings and use of lethal force', (n 22).

⁵² Summary of the Human Rights Council interactive panel discussion of experts on the use of remotely piloted aircraft or armed drones in compliance with international law: Report of the Office of the United Nations High Commissioner for Human Rights, UN Doc A/HRC/28/38, 15 December 2014, para 56.

to cyber operations. Although it is clear that international humanitarian law would apply once the threshold of armed conflict is reached, different views exist on the characterization of cyber operations. According to Noam Lubell:

Cyber operations are a classic example of an attempt to fit things into the laws of armed conflict where in fact they should not be addressed through these laws at all. The default classification of cyber operations, on one view, is that they amount to an armed conflict and so the laws of armed conflict apply. However, it is also argued that since such operations do not adhere to the definition of attack under international humanitarian law, the restrictions on attacks, imposed by the principle of distinction, do not apply ... One of the main challenges is to identify ... which type of operation should be addressed under the laws of armed conflict and which type should not.⁵³

In deciding which operations should be addressed by international humanitarian law, the characterization of each situation should be guided by the object and purpose of this body of law: the protection of victims of armed conflict. Lowering the threshold for the use of lethal force would contravene this if it resulted in the applicable legal protections being rendered less effective, leaving those affected in a more vulnerable position. In the continuing development of international humanitarian law, it is likely, according to Michael Schmitt, that 'new norms will emerge to address phenomena that have so fundamentally changed that the existing classification architecture ... reveal classificatory lacuna'. He states that: '[s]ome aspects of conflict classification are likely to fall into desuetude ... Other aspects will likely be reinterpreted to fit emerging contexts of armed conflict that were unanticipated.' If cyber operations are to be accommodated, this must be undertaken in a manner that preserves the integrity

⁵³ Chatham House, International Law Meeting Summary: Classification of Conflicts: The Way Forward, Chatham House, London, 1 October 2012, 14–15, accessed 4 June 2017 at goo.gl/ffwHCZ.

⁵⁴ Michael N Schmitt, 'Classification in future conflict' in Elizabeth Wilmshurst (ed), *International law* and the classification of conflicts (Oxford University Press 2012), 455–77, 477.

⁵⁵ Ibid.

of armed conflict as a concept of international humanitarian law, consistent with its object and purpose.

Likewise with regard to autonomous weapon systems, this is an area where consensus on the basis for characterization is urgently required. According to William Boothby:

Future developments in weapons technologies are likely to enable attacks to be prosecuted remotely, automatically, potentially autonomously and, in either case, perhaps also anonymously. Some such developments cause one to wonder whether notions of remote attack will take us to a point at which there is a degree of dissociation between armed forces personnel and the hostilities for which they are responsible. Taken to an extreme, perhaps hostilities in which machines target one another autonomously and/or automatically would cease to be 'warfare' as that term has traditionally been understood.⁵⁶

Accordingly, it is conceivable that autonomous weapon systems could be deployed in hostilities against other autonomous weapon systems. In the absence of human participation, could such a situation be characterized as one of armed conflict? As with other forms of remote warfare, assessments would need to be undertaken on a case-by-case basis. Even if autonomous weapon systems were to be deployed in a context where human casualties did not arise directly from the conduct of hostilities, it should be recognized that victims also result from displacement and the destruction of property, including the damage to works and installations containing dangerous forces, such as nuclear power stations. The question of qualification for application of international humanitarian law would necessarily need to take into account the function that law serves not only in relation to the protection of the human person but also with regard to the protection of cultural property and the natural environment.

CONCLUSION

⁵⁶ William Boothby, 'The Legal Challenges of New Technologies: An Overview', in H Nasu and R McLaughlin (eds), *New Technologies and the Law of Armed Conflict* (T.M.C. Asser Press 2014) 21–8, 25.

To respond to the challenges posed by remote warfare, it is necessary to be mindful of how the law has evolved and the importance of preserving the integrity of its interpretation. In order for this to be realized the concept of armed conflict must be interpreted in terms consistent with the object and purpose of international humanitarian law, that is, the protection of victims. As noted by Elizabeth Wilmshurst, '[t]he protection of victims of war depends upon the proper application of international humanitarian law and that depends upon the appropriate classification'. ⁵⁷ Indeed:

Legal complexities about the distinctions between categories of hostilities should not be allowed to get in the way of the objectives of international humanitarian law, either by making the application of the legal protections more difficult or by rendering the law so complex that none but the most sophisticated of armed forces can realistically apply it.⁵⁸

In order to further the protection provided by the law, newer forms of warfare—including the use of armed drones, autonomous weapons system and cyber operations—must be accommodated in the concept of armed conflict. The basis for doing so should be consistent with the existing framework that governs the conduct of hostilities, irrespective of how hostilities are characterized. As noted by the International Military Tribunal at Nuremburg, the laws that govern armed conflict 'are not static, but by continual adaptation follow the needs of a changing world'. ⁵⁹

⁵⁷ Elizabeth Wilmshurst (ed), *International Law and the Classification of Conflicts* (Oxford University Press 2012) 500–1.

⁵⁸ Ibid.

⁵⁹ *Trial of Major War Criminals before the International Military Tribunal*, Nuremburg, 14 November 1945–1 October 1946, Vol. I, 221.