



THE LEGALITY OF DRONE STRIKES UNDER INTERNATIONAL HUMANITARIAN LAW

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Wayne Magwaza

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ABSTRACT

The increasing use of armed drones in armed conflict presents significant questions as to the legality of their use under International Humanitarian Law. There has been a protracted debate amongst scholars on this subject. As the use of drones becomes more prevalent, it has become more important to examine whether their use in armed conflict does not violate some existing rules of International law.

The analysis of whether or not drone strikes violate international law has been debated in terms of two regimes of law; *jus in bello* which applies during armed conflict and *jus ad bellum* which refers to the conditions under which states may resort to the use of force. The present research is focused on the use of drones in armed conflict and therefore pays attention to the *jus in bello* aspect in determining the permissibility of drone strikes during armed conflict. This thesis seeks to explore specific rules of International Humanitarian Law (IHL) and determine whether drone strikes are capable of conforming to these principles.

The thesis highlights the historical, current and most likely future use of drones and discusses the implications of such use under IHL. In that regard, the research utilises examples of contemporary conflict situations in which drones have been employed. The lack of transparency and accountability with regard to drone strikes has also provoked a considerable amount of debate in the media and amongst international law scholars. Thus, the thesis seeks to further highlight the issues pertaining to liability in case of alleged violations and suggests how this should be dealt with.

ABBREVIATIONS

AI	Artificial Intelligence
AWS	Autonomous Weapon Systems
IAC	International Armed Conflict
IHL	International Humanitarian Law
ICJ	International Court of Justice
IL	International Law
IHRL	International Human Rights Law
LAWS	Lethal Autonomous Weapon Systems
LOAC	Law of Armed Conflict
NIAC	Non International Armed Conflict
UAS	Unmanned Aircraft System
UAV	Unmanned Aerial Vehicle
UK	United Kingdom
UN	United Nations
USA	United States of America

TABLE OF CONTENTS

- I . CHAPTER 1: INTRODUCTION.....8**
 - 1. Background and research questions-an overview.....8
 - 2. Methodology and Limitations.....9
 - 3. The emergence of armed drones as a weapon of choice in armed conflicts.....9
 - 4. The principles of International Humanitarian Law.....10
 - 5. Conclusion.....14

- II . CHAPTER 2: THE USE OF DRONES IN ARMED CONFLICT..... 14**
 - 1. Introduction.....14
 - 2. The legal framework applicable to drone strike.....16
 - 3. Armed conflict.....17
 - 4. The controversy surrounding drones.....17
 - 5. Looking into the technology of drones.....19
 - a. What is a drone?.....19
 - b. Types of drones and how they have evolved.....20
 - c. The evolution of drones.....21
 - 6. Drone strikes as a means of warfare.....22
 - 7. The rules of targeting under IHL.....23
 - 8. Conclusion.....25

- III. CHAPTER 3: NECESSITY AND HUMANITY.....26**
 - 1. Introduction.....26
 - 2. The development of the principle of military necessity in armed conflict.....27
 - 3. Key elements of necessity.....29
 - 4. Military necessity and targeting by drones.....29
 - 5. Humanity.....31
 - 6. The practicability of surrendering to a drone.....31
 - 7. conclusion.....33

- IV. CHAPTER 4: THE PRINCIPLE OF DISTINCTION.....34**

1. Introduction.....	34
2. The principle of distinction under IHL.....	35
3. Combatant status.....	38
4. Civilian status.....	38
5. Civilian objects and military objectives.....	39
6. Can drones distinguish between civilian and military targets?.....	41
7. Indiscriminate attacks.....	45
8. Conclusion.....	45
V. CHAPTER 5: THE PRINCIPLE OF PROPORTIONALITY	46
1. Introduction.....	46
2. Proportionality under IHL.....	47
3. Applying the principle of proportionality to drones.....	49
4. Care and Precaution.....	50
5. Accuracy of drones.....	51
6. Value of the target.....	53
7. Line of sight.....	54
8. The drawbacks.....	55
9. Conclusion.....	57
VI. CHAPTER 6: LIABILITY.....	58
1. Introduction.....	58
2. Transparency.....	59
a. Right to truth.....	62
3. Accountability.....	65
a. Duty to Investigate.....	67
b. Reparations.....	69
4. Conclusion.....	69
5. Recommendations.....	70

a. Investigate.....	70
b. Review of targeting practices.....	71
c. Pilot training and continuous assessment.....	71
d. Creation of a convention controlling the use of specific drones.....	72
VI. BIBLIOGRAPHY.....	73

I . CHAPTER 1: INTRODUCTION

1. Background and research questions- an overview

Drones, also known as an Unmanned Aerial Vehicle (UAV), have become a widely used tool in warfare.¹ In military terms, a drone is defined as an aircraft that operates without a human controller onboard and has the ability to fly either autonomously or via remote control.² This is achieved through a system that includes essential networks, equipment, and personnel necessary to operate an unmanned aircraft.³ These components form what is known as the Unmanned Aircraft System (UAS).

Drones offer unique capabilities that aid in surveillance, intelligence gathering, reconnaissance missions, and target acquisitions, thereby enhancing military situational awareness.⁴ Currently, the military drone market is primarily dominated by countries like the United States of America, China, and Israel.⁵ However, as the proliferation of high technology military drones increases, other states are accelerating the development and enhancement of this technology. Countries such as China, Iran, Pakistan, Ukraine, and Turkey have made significant progress in this area.⁶ Beyond military applications, drones are also increasingly employed in law enforcement and counter-terrorism efforts. Their ability to provide real-time surveillance and gather critical intelligence has made them invaluable in monitoring criminal activities, tracking suspects, and preventing potential terrorist threats. This versatile technology continues to revolutionise various fields, offering unparalleled capabilities in both combat and security operations.

¹ Richard J Gross 'Different Types of Military Drones: Explained In Details' available at <https://www.propelrc.com/types-of-military-drones/> accessed on 16 September 2024.

² Guilmartin, John F 'unmanned aerial vehicle'. Encyclopedia Britannica, 10 Sep. 2024, available at <https://www.britannica.com/technology/unmanned-aerial-vehicle> accessed 16 September 2024.

³ Ibid.

⁴ Garrett Connolly '5 Ways Drones Can Improve Soldier Safety in Modern Military Operations' available at <https://elistair.com/resources/military-drones/5-ways-drones-can-improve-soldier-safety-in-modern-military-operations/> accessed on 20 September 2024.

⁵ Sana Mir and Anthony Cullen The Characterisation of armed conflict and Targeted Killing of Suspected Terrorists Under International Humanitarian Law: Reflections on the Future of Jus In Bello (2019) 4 *Kilaw Journal, special Supplement*, 1440 at 355-56.

⁶ Ibid.

2. Methodology and limitations

This dissertation employs a desk-based research methodology to analyse the legal, ethical, and practical challenges posed by the use of drones in warfare. The research focuses on primary and secondary data sources, including academic literature, legal texts, policy documents, and case studies, to provide a comprehensive overview of the regulatory landscape and the implications of drone technology. The data collection process involved a systematic review of existing literature on the use of drones, with particular emphasis on IHL.

By synthesising information from various secondary sources, this methodology provides a robust framework for understanding the complex interplay between drone technology, legal principles, and ethical considerations. The insights gained from this research will contribute to the ongoing discourse on regulating the use of drones in modern warfare and other critical areas.

The primary limitation of this desk-based research is its reliance on secondary data, which may not capture the most recent developments or nuanced perspectives from all stakeholders. Additionally, the availability of data on specific drone operations and policies may be restricted due to confidentiality and security concerns.

3. The emergence of armed drones as a weapon of choice in armed conflicts

The transition from traditional ground forces to armed drones in warfare marks a significant transformation in how conflicts are conducted. It is estimated that over ninety nations possess military drones, with twenty four of them having armed drones.⁷ These armed drones have been used in at least thirteen countries.⁸ However, for millions of civilians trapped in conflict zones, the presence of armed drones is a horrifying reality. While the use of military drones is now generally accepted as a legitimate means of

⁷ Who has armed drones? available at <https://dronewars.net/who-has-armed-drones/> accessed on 15 November 2024.

⁸ Schwartz Joshua A and Matthew Fuhrmann 'Do Armed Drones Counter Terrorism, Or Are They Counterproductive? Evidence from Eighteen Countries' (2022) *International Studies Quarterly* 66.

warfare, it has been argued that their use often contradicts the basic principles of the laws of war.⁹

There is no doubt that drones have become a significant advancement in situations of armed conflict. This innovation in warfare is crucial for militaries and states to effectively combat contemporary threats, such as terrorism. Drones not only have distinct advantages over manned aircraft, but they can also perform tasks that humans cannot.¹⁰

However, the use of drones as a means of warfare is subject to regulation by International Humanitarian Law (IHL). IHL aims to mitigate the consequences of armed conflicts by restricting the means and methods of warfare. Hence, it is often referred to as the “Law of Armed Conflict” (LOAC) or the “Law of War”.

4. The principles of IHL

Modern IHL comprises a body of customary rules and several treaties. The most significant of these treaties were developed in The Hague in 1899 and 1907.¹¹ Subsequent agreements were developed in Geneva in 1949 and 1977, focusing on the protection of individuals from the effects of armed conflicts.¹²

The protective principles of International Humanitarian Law (IHL) apply to all parties in an armed conflict regardless of their involvement in hostilities or the reasons and legality of the conflict.¹³ As soon as an armed conflict situation arises, IHL and its fundamental principles come into effect.¹⁴ Therefore, when drones are used as a

⁹ Krebs S ‘Above the law: Drones, aerial vision and the law of armed conflict – a socio-technical approach’ (2023) *International Review of the Red Cross* 1690 .

¹⁰ Op cit note 4.

¹¹ ‘The Practical Guide to Humanitarian Law The Hague Conventions of 1899 and 1907’ available at <https://guide-humanitarian-law.org/content/article/3/the-hague-conventions-of-1899-and-1907/> accessed on 20 September 2024.

¹² ‘The Practical Guide to Humanitarian Law Geneva Conventions of 1949 and Additional Protocols I and II of 1977’ available at <https://guide-humanitarian-law.org/content/article/3/geneva-conventions-of-1949-and-additional-protocols-i-and-ii-of-1977/> accessed on 20 September 2024.

¹³ ‘International Committee of the Red Cross (ICRC) What is International Humanitarian Law’ available at https://www.icrc.org/sites/default/files/document/file_list/what-is-ihl-factsheet.pdf accessed on 20 September 2024. ICJ, *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, 1996, para. 86.

¹⁴ *Ibid.*

weapon of warfare within an armed conflict situation, their use must comply with the fundamental principles of IHL.

Given that IHL is designed to regulate the means of warfare, the emergence of evolving military technology like drones often poses challenges to this body of law. The current international regulatory standard concerning armed conflict and its means is primarily governed by legal instruments such as Additional Protocol I and II (AP I and AP II) to the Geneva Conventions of 1949, which were implemented nearly 40 years ago. These principles are expected to regulate contemporary means of warfare, including technological advancements like drones, which the creators of these instruments likely did not anticipate.

IHL is primarily governed by several fundamental principles: military necessity, humanity, honour, precaution, distinction, and proportionality. The principle of military necessity refers to achieving a military advantage through a specific military objective.¹⁵ The principle of humanity asserts that once a military objective has been achieved, any further infliction of harm or injury is unnecessary.¹⁶ The principle of honour, or chivalry, promotes mutual respect between adversaries during battle. Additionally, the principle of precaution stipulates that an attack should not be launched without careful preparation to spare civilians and civilian objects from the adverse effects of the attack.

In the context of drone warfare, adherence to the principles of military necessity, humanity, honour, and precaution is achievable. Drones have advanced technical capabilities and use a wide range of surveillance techniques along with precision-guided Hellfire missiles, making them a discriminate means of warfare. Therefore, armed drones can target military objectives efficiently and allow militants to take all feasible precautions before launching an attack. However, drones are often used in ways that might infringe on these principles. Therefore, a military commander must carefully consider each fundamental principle of IHL, even in situations where compliance appears readily achievable, to ensure effective adherence to IHL.

¹⁵The Practical Guide to Humanitarian Law Military Necessity available at <https://guide-humanitarian-law.org/content/article/3/military-necessity/> accessed on 20 September 2024. *Prosecutor v. Blaškić* para 157.

¹⁶Nils Melzer *International Humanitarian Law: A Comprehensive Introduction*, ICRC (2022) 19.

While drones are legitimate weapons, they, like any other weapon, are prone to indiscriminate use. This leads to complex issues, particularly concerning the principles of distinction and proportionality

The principle of distinction requires individuals involved in an armed conflict to always differentiate between non-combatants and combatants, as well as between military objectives and civilian objects.¹⁷ It also demands that all attacks be directed only against military objectives.¹⁸

The principle of proportionality stipulates that even military objectives should not be targeted if such an attack is likely to result in civilian casualties disproportionate to the direct or concrete military advantage anticipated from the attack.¹⁹ These two principles impose significant responsibilities on a commander planning a strike, as they must balance potential non-combatant casualties and damage to non-combatant property against the real and direct military advantage expected from the attack.

The persistent use of drones in warfare highlights their significance in various contexts. In armed conflict situations, drones enhance the safety of remote drone pilots and improve surveillance efficiency.²⁰ Their ability to observe and subsequently attack moving targets, such as terrorist or rebel forces, has been praised for its potential to greatly enhance the situational awareness of military officers.²¹

Other noteworthy contexts include the use of drones in lethal operations outside of armed conflict environments, and in peacekeeping operations, where drones enable conflict monitors to enhance their situational awareness. The use of remotely piloted unmanned aircraft, by its nature, becomes challenging when expected to comply with principles requiring complex decision-making, such as distinguishing between fighters and civilians. This is particularly true in nuanced military situations where combatants

¹⁷Nuclear Weapons, Advisory Opinion *supra* note 13 para 78.

¹⁸*ibid.*

¹⁹'How Does The Law Protect in War?' available at https://casebook.icrc.org/a_to_z/glossary/proportionality#:~:text=The%20principle%20of%20proportionality%20prohibits,and%20direct%20military%20advantage%20anticipated%E2%80%9D accessed on 20 September 2024.

²⁰*Op cit* note 4.

²¹*Op cit* note 4.

may be disguised as civilians. A breach in the principle of distinction could potentially lead to horrific results, and the situation may be further complicated when civilians assume the role of belligerents and subsequently revert to their civilian status.

While Article 50 of AP I defines a “civilian” as a person who is not a member of an armed force, Article 31(3) states that civilians may lose their “civilian status” and protection if they directly participate in hostilities. Additionally, the principle of proportionality requires determining whether an attack is disproportionate in relation to the derived military advantage.

Achieving legitimate military objectives while respecting both the principles of distinction and proportionality can be a challenging task when conducted via drones, where minimal or no human decision-making is involved. Therefore, exploring the challenges faced by states in terms of these principles is a crucial part of assessing the adequacy of IHL in regulating instances of armed combat, such as drone warfare. This is especially true since the ICJ, in its *Legality of the Threat or Use of Nuclear Weapons* (1996) advisory opinion, considered IHL and ruled that the principles of proportionality, distinction, and the Martens Clause can be considered as the “cardinal principles contained in the texts constituting the fabric of humanitarian law”.²²

Another challenge posed by the use of drones in warfare is their potential misuse, such as the heavily criticised targeted killing or signature strikes program implemented by the United States. Under this program, drone strikes are authorised against groups of individuals exhibiting certain definitive characteristics or signatures typically associated with terrorist activity, but whose identities are unknown. These strikes have a high likelihood of violating the IHL principle of distinction, as signature strikes are not always based on sufficient evidence to meet the requirements of this principle.

In light of the above, several other significant challenges can be observed. Firstly, there’s a need to determine whether IHL can regulate concerns regarding transparency in drone warfare. There is often a lack of information on states’ drone targeting practices

²² *Nuclear Weapons, Advisory Opinion supra note 13 para 78.*

and policies, and data regarding drone strike operations, casualties, and injuries are often inaccessible.

Secondly, accountability presents another challenging aspect of drone warfare, especially when it comes to determining who to hold accountable for a drone strike and the potential civilian casualties resulting from it, as well as the procedure to correct mistakes.

Lastly, the race towards the development of fully autonomous drones poses a particular challenge to IHL's ability to regulate the use of this type of technology in warfare. In addition to these issues, the significant impact that drones have on armed conflict situations is pressuring the international community to move towards drafting regulations for the use of drones in warfare. This dissertation, therefore, analyses several concerns faced by IHL that challenge the ability of its fundamental principles to regulate contemporary means of warfare, such as drones.

5. Conclusion

Issues such as the misuse of drones for targeted killings, transparency in drone operations, accountability for drone strikes, and the emergence of fully autonomous drones pose challenges to IHL. Addressing these concerns requires a robust regulatory framework to ensure compliance with humanitarian principles and mitigate the adverse impacts of drone technology in armed conflicts.

This dissertation will examine the various legal, ethical, and practical challenges posed by drone warfare, emphasising the need for continued international efforts to regulate the use of drones in line with IHL. As the technology evolves, so too must the legal and regulatory responses to safeguard the principles of justice and humanity in contemporary warfare.

II . CHAPTER 2: THE USE OF DRONES IN ARMED CONFLICT

1. Introduction

As pointed out by the former United Kingdom's security and intelligence coordinator, Professor Sir David Omand GCB:

“No aspect of modern warfare is as controversial as the use of armed drones. Everything about drone technology is contested: its novelty, legality, morality, utility, and future development. Even the choice of what to call such systems is value-laden.”²³

Drones have undoubtedly changed the way modern warfare is conducted.²⁴ The ongoing war between Russia and Ukraine has in fact shown that drones will play a much bigger role than before as the way in which war is conducted changes.²⁵ Several States already possess drones as part of their military arsenal or are at least planning to add them. Countries such as Israel, Iran, and the United States of America have operationally deployed armed drones.²⁶ Most recently the war between Russia and Ukraine has demonstrated a new level of drone usage as they have been used significantly in that war. The popularity of armed drones as a preferred tool for conducting military operations has also extended to some non-state actors such as ISIS and Hamas who have reportedly incorporated drones in their operations.²⁷

As a result, the increasing use of drones to carry out attacks during armed conflict presents significant questions as to the legality of their use under International Humanitarian Law- the law of war.²⁸ Are drones as a weapon system lawful? Do they conform with the obligation to spare civilians and who must be held responsible in cases

²³Shima D Keene 'Legal and Lethal? The Ethics of Drones Strikes' available at <https://www.jstor.org/stable/resrep11765> accessed on 21 September 2024 at 1.

²⁴'Introduction: How we became a World of Drones' available at <https://www.newamerica.org/future-security/reports/world-drones/introduction-how-we-became-a-world-of-drones/> accessed 21 September 2024. Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne and Thompson Chengeta 'The International Law Framework Regulating The Use of Armed Drones' (2016) 65 *The International Comparative Law Quarterly* 793.

²⁵ K Monks 'Clash of drones could decide the outcome of the Ukraine war, and shape future conflicts' available at <https://inews.co.uk/news/world/clash-drones-ukraine-war-conflicts-2429906> , accessed on 29 July 2023.

²⁶New America 'Introduction: How we became a world of Drones' available at <https://www.newamerica.org/future-security/reports/world-drones/introduction-how-we-became-a-world-of-drones/> accessed on 19 November 2024.

²⁷Non-State Actors with Drone Capabilities available at <https://www.newamerica.org/future-security/reports/world-drones/non-state-actors-with-drone-capabilities> accessed on 21 September 2024.

²⁸Op cit note 26.

where there are violations? These are some of the questions that have been raised which this dissertation seeks to answer.

2. The legal framework applicable to drone strikes

In order to determine the lawfulness of any drone strike, the applicable legal framework must be identified. In the case of drone strikes, this is determined by the context in which the strike took place, that is; whether or not there is an armed conflict.²⁹ If it is determined that there is armed conflict, International Humanitarian Law applies.³⁰ The significance of the context in which a drone strike occurs cannot be understated because it determines the rules which apply and their implications. As former United Nations Special Rapporteur, Phillip Aston put it:

“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.”³¹

Thus, it is important to contextualise every situation as the implications are different depending on the legal framework applicable in each situation.³²

Moreover, it is important to note that where drones are used and there is no armed conflict, then the national rules of the specific jurisdiction and International Human Rights Law apply.³³ The focus of this dissertation is only on the application of the law of war and hence it will not look into the legality of the use of armed drones in instances where there is no armed conflict. For the purposes of this dissertation, it is acknowledged that not all instances where drones have been deployed qualify as

²⁹ Op cit note 5 at 356.

³⁰ ICRC What is International Humanitarian Law ,available at https://www.icrc.org/sites/default/files/document/file_list/what-is-ihl-factsheet.pdf ,accessed on 21 September 2024.

³¹ 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.

³² Op cit note 5 at 356.

³³ Christof Heyns, Dapo Akande, Lawrence Hill-Cawthorne and Thompson Chengeta The International Law Framework Regulating The Use of Armed Drones (2016) *The International Comparative Law Quarterly*, 65 at 805.

armed conflicts under IHL. However, this study is limited to cases where an armed conflict exists, and therefore, the rules of IHL apply.

3. Armed conflict

Armed conflict can be classified as international armed conflict (IAC) or non international armed conflict (NIAC). International armed conflict generally involves conflict between states.³⁴ This includes situations where states have openly declared war and other de facto armed conflict between two or more states.³⁵ On the other hand NIAC is normally between the state and an organised non-state armed group such as a rebel group. Non-international does not necessarily refer to the territorial conflict of the conflict. Rather, it stems from the status of the parties.³⁶ Hence, a situation whereby a state is fighting an organised armed group in another state may be classified as a NIAC in which the rules of NIAC apply. This excludes situations where an organised group fights a state on behalf of another state in which it would be classified as an international armed conflict and the rules IAC and not NIAC apply.³⁷ There are other requirements that would have to be met in order to classify a NIAC as such. However, this dissertation does not seek to get into the technicalities around the definitions of armed conflict. It assumes the existence of an armed conflict in situations in which drones are or have been deployed. It suffices to say that IHL applies in instances of both IAC and NIAC and therefore the use of armed drones in both types of conflict is subject to the rules of IHL. The existence of an armed conflict is therefore important in order for the rules of IHL to apply to any drone strike.

4. The controversy surrounding drones

Some commentators have labelled drones as 'armed robotic killers'.³⁸ Others have argued that the "playstation mentality" whereby drone operators operate the drone far removed from the battlefield by using a "joystick" results in individuals being

³⁴ Ibid.

³⁵ Common Article 2 of the Geneva Conventions of 1949.

³⁶ Op cit note 33.

³⁷ Ibid.

³⁸ Chris Jenks 'Law From Above: Unmanned Aerial Systems, Use of Force and the Law of Armed Conflict' (2010) 85 *North Dakota Law Review* 649 at 650.

oblivious to the consequences of their actions and presents a breeding ground for violations of international law.³⁹ Such sentiments have spurred debate on whether or not their use is capable of complying with International law. In 2009 the then United Nations special Rapporteur on extrajudicial killings, Phillip Alston, also made the following remarks: “My concern is that these drones, these Predators, are being operated in a framework which may well violate international humanitarian law and international human rights law”.⁴⁰ This perhaps signifies the controversy that has surrounded the use of armed drones in modern day warfare.

On the other hand, proponents of drone technology have pointed out the advantages to militaries that have them as part of their arsenal. They cost far less than fighter jets and they allow the operator to control it with a “joystick” away from the battlefield.⁴¹ This means that they are able to reach places that would otherwise be largely inaccessible with no risk to the pilot even in instances where the drone might get shot down.⁴² Furthermore, having a drone means that in some instances there are little or no “boots on the ground” and hence there is less risk of combatants losing their lives in battle. It should be noted that this advantage is seen from the point of view of the attacker and the criticism of this is that it does not necessarily stop the number of fatalities overall.

Although drones are now widely considered as legitimate means of warfare, it is their use that raises questions as to whether or not they conform with the fundamental principles of IHL. Under IHL, there is no specific prohibition on the use of drones and they are not considered to be inherently indiscriminate.⁴³ Thus, the idea that drones in

³⁹ P Alston & H Shamsi ‘A killer above the law’ available at <https://www.theguardian.com/commentisfree/2010/feb/08/afghanistan-drones-defence-killing> accessed on 11 April 2023. P Alston Report of Special Rapporteur on Extrajudicial , summary or arbitrary executions available at <https://www2.ohchr.org/english/bodies/hrcouncil/docs/14session/A.HRC.14.24.Add6.pdf> para 84 accessed on 21 September 2024.

⁴⁰ ‘US warned on deadly drone attacks’ *BBC news* available at <http://news.bbc.co.uk/2/hi/8329412.stm> accessed on 11 April 2023.

⁴¹M E O’Connell ‘Unlawful Killing with Combat Drones: A Case Study of Pakistan, 2004-2009’ available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1501144 , accessed on 10 April 2023.

⁴²Ibid.

⁴³The Use of Armed Drones Must Comply with Laws, available at <https://www.icrc.org/en/doc/resources/documents/interview/2013/05-10-drone-weapons-ihl.htm> ,accessed on 21 December 2023.

themselves are not an issue when it comes to conforming with the principles of IHL is acceptable. However, the way in which they are deployed raises questions in terms of conformity with these principles. In other words, the significance of drones in relation to IHL is not so much about what they are but the manner in which they are deployed. In that respect, it can be argued that they are not different from other weapon systems such as fighter jets or helicopters.⁴⁴

Nonetheless, in as much as this may be the case, their use during armed conflict is still subject to the rules of IHL. Due to the fact that the contentious issue is the way in which drones are used during armed conflict, it is argued that the legality of their use must be determined on a case-by-case basis and each situation may have to be considered on its own merits. This dissertation will investigate and highlight some of the instances in which drones have been deployed and the potential challenges faced by IHL due to current and future developments in drone technology. The following section looks into the development of drone technology to try and understand why it has become a weapon of choice for several states and why there are differing views as to the legality of their deployment during armed conflict.

5. Looking into the technology of drones

a. What is a drone?

“Drones” is the widely used colloquial term when referring to remotely piloted aircraft or unmanned aerial vehicles.⁴⁵ A USA federal legislation adopted in 2012 defines the term ‘unmanned aircraft’ as “an aircraft that is operated without direct human intervention from within or on the aircraft”.⁴⁶ This means that there would be no human being onboard the aircraft but the aircraft would be controlled from a remote location. A drone is therefore able to conduct an attack and return to base without any aircrew onboard.⁴⁷ Unmanned aerial vehicle has also been defined as a “powered aerial vehicle that does

⁴⁴ibid

⁴⁵ Kenneth R. Himes, OFM *Drones and the Ethics of Targeted Killing* (2016) 11.

⁴⁶ S 331(8) FAA Modernization and Reform Act of 2012.

⁴⁷ Brian Sang *Unleashing The Robotic Dogs of War: What Implications Does The Use of Unmanned Predator Drones For Targeted Killing Have on The Interpretation, Application and Formation of International Law?* (LLM Thesis, University of Cape Town, 2011) 4.

not carry a human operator ...can fly autonomously or be piloted remotely, can be expendable or recoverable, and can carry a lethal or non-lethal payload”.⁴⁸

Drones can therefore merely serve a reconnaissance function or carry missiles in which case they will be used to conduct attacks. Of the two uses, the former is less controversial than the latter and the reasons for this will be highlighted throughout the course of this dissertation. Although drones is the widely used term, all the terms mentioned above are often used interchangeably. For the purposes of this research, the preferred term is drones.

b. Types of drones and how they have evolved

Generally speaking, there are three categories in which the different types of drones fall under. The categories are: 1) Drones which are fully controlled by humans, 2) Drones which are partly controlled by human beings and 3) Drones which have no human control. The implications of each category of drones with respect to compliance with the principles of IHL will become evident in this discussion.

The three types of drones are human controlled drones; also known as human in the loop drones, semi-autonomous drones and fully autonomous drones. The human in the loop system allows for a drone to be controlled remotely by an operator. Recent and ongoing developments in drone technology have also led to the development of semi-autonomous drones. The semi autonomous drone systems allow the drone to perform several functions autonomously but with the supervision of a controller who would be in a position to override a decision to carry out an attack.

Perhaps the most controversial types of drones; fully autonomous drones also known as “human out of the loop” systems in which drones are fully autonomous allow the drone to make use of artificial intelligence to look for targets and attack without human supervision. These systems envisage a situation whereby human beings are completely “out of the loop”. What this means is that the drones will be able to make decisions on to identify and attack targets with no human involvement. Driven by Artificial Intelligence,

⁴⁸Joint Publication 1-02 The Department of Defense Dictionary of Military and Associated Terms 12 April 2001 (As Amended Through 17 October 2008) 579 available at [http://www.bits.de/NRANEU/others/jp-doctrine/jp1_02\(10-08\).pdf](http://www.bits.de/NRANEU/others/jp-doctrine/jp1_02(10-08).pdf), accessed on 29 July 2023.

autonomous drones are therefore able to determine their own behaviour in order to achieve human-directed military objectives. In essence, autonomous drones fly themselves on predetermined routes and carry out specific military tasks which are based on pre-programmed instructions without any input from an operator on the ground.⁴⁹ With the development of such systems, the question arises whether or not this can be regulated under the principles of IHL.

The use of autonomous drones has become a reality in modern warfare and will possibly shape the way in which future wars are conducted. Artificial Intelligence has been made a part of the decision making processes during armed conflict.⁵⁰ For instance there was a suggestion that the Turkish-made Kargu-2 drones were used in fully automatic mode in the Libyan war in 2020.⁵¹ Most recently, the war between Ukraine and Russia has seen the deployment of autonomous drone systems to target infrastructure and personnel.⁵²

c. The evolution of drones

As alluded to above, different types of drones serve different purposes. As such, not all drones carry weapons that are used to fight.⁵³ Historically, they were used for reconnaissance and surveillance.⁵⁴ An example of this is the RQ-4 Global Hawk drone which is a US air force operated drone. This drone was designed with the ability to fly at high altitude for long periods of time while providing near real time intelligence, reconnaissance and surveillance.⁵⁵ As such, the drone could track potential targets

⁴⁹ Op cit note 1.

⁵⁰ Ruben Stewart and Georgia Hinds 'Algorithms of war: The use of artificial intelligence in decision making in armed conflict', available at <https://blogs.icrc.org/law-and-policy/2023/10/24/algorithms-of-war-use-of-artificial-intelligence-decision-making-armed-conflict/> accessed on 26 December 2023.

⁵¹ Nils Adler 'Are Killer Robots The Future of War?' available at <https://www.aljazeera.com/features/2023/5/16/are-killer-robots-the-future-of-war> (accessed on 12 September 2023).

⁵² Ibid.

⁵³ Op cit 43.

⁵⁴ Casey-Maslen *Weapons under International Human Rights Law* 382.

⁵⁵ <https://www.af.mil/About-Us/Fact-Sheets/Display/Article/104516/rq-4-global-hawk/>

persistently while providing high quality images.⁵⁶ In essence this drone was used as a tool for information or intelligence gathering.

From carrying out reconnaissance only to carrying weapons to be used to attack, the US developed the MQ-1B Predator drone. According to the US air force, this drone is “an armed, multi mission, medium altitude, long endurance remotely piloted aircraft that is employed primarily as an intelligence-collection asset and secondarily against dynamic execution targets”.⁵⁷ As such, the Predator was developed in order to provide surveillance, intelligence and have the capability of striking at targets.⁵⁸

One of the most famous drones that has been deployed is known as the MQ-9 Reaper. The Reaper was developed with more advanced technology with reconnaissance and strike capabilities. As such, it is equipped with cameras, sensors and is capable of carrying missiles and firing at targets.⁵⁹ According to the US Air force, the MQ-9 Reaper is designed to “execute time-sensitive targets with persistence and precision, and destroy or disable those targets”.⁶⁰ These capabilities enable it to be used in combat operations during armed conflict. In recent times, they have gained popularity for firing hellfire missiles to kill suspected members of Al Qaeda.⁶¹

5. Drone strikes as a means of warfare

It is widely believed that the USA were the first to use a drone carrying hellfire missiles to target and kill when a Predator drone was used to kill Mohammed Atef, a senior member of alleged terrorist group, Al Qaeda in Afghanistan.⁶² Similar attacks have become the preferred method for killing members of Al Qaeda and this has

⁵⁶ NR Steyn *The Adequacy of International Humanitarian Law in Regulating the Challenges Posed by Drone Warfare* (LLM Dissertation, North-West University, 2018).

⁵⁷ Us Air Force MQ-1B Predator, available at <https://www.af.mil/About-Us/Fact-Sheets/Display/Article/104469/mq-1b-predator/#:~:text=Mission-,The%20MQ%2D1B%20Predator%20is%20an%20armed%2C%20multi%2Dmission,secondarily%20against%20dynamic%20execution%20targets>, accessed on 16 January 2024.

⁵⁸ *ibid*.

⁵⁹ MQ-9 Reaper, available at <https://www.af.mil/About-Us/Fact-Sheets/Display/Article/104470/mq-9-reaper/> accessed on 11 January 2024.

⁶⁰ *Ibid*

⁶¹ *Op cit* note 54 at 384.

⁶² Cortright et al *Drones and the Future of Armed Conflict 2*.

resulted in the controversy surrounding the legality of their use under IHL. This is particularly due to the devastating effects of the attacks. The next section of this discussion looks into how drones have become an important tool as a means of warfare.

As it has become evident in recent times that drones have become an important part of military operations, they can be used in different contexts due to their capabilities. Within armed conflict situations; whether international or non-international, they can be used to efficiently identify and observe the enemy and subsequently carry out attacks without putting the operators in harm's way. Drones are able to carry out these functions while being operated from several kilometres away from the target and this allows it to collect critical information that can be used in carrying out an attack against the enemy with precision. For instance, some drones are so advanced to an extent that they can stay in the air for several days monitoring a potential target and are able to zoom into small objects from several kilometres above ground thereby allowing for the operator to strike with precision. It has been argued that the ability to “strike with precision” is a significant aspect of drone technology which allows it to conform with principles of IHL. In order to understand the application of the rules of IHL, the rules that apply must be outlined. The following section highlights the general rules of lawful targeting during armed conflict which must be adhered to when targeting by drones.

6. The rules of targeting under IHL

The rules which govern targeting during armed conflict are mainly found in the 1907 Fourth Hague Convention and the first two Additional Protocols to the Geneva Conventions. The Hague Convention regulates the “means and methods” of warfare.⁶³ The Additional Protocols have been seen as a combination of the aims of the Hague regulations which are to govern the means and methods of warfare and the aims of the Geneva Conventions which are to protect the victims of war.⁶⁴ The principles of

⁶³ See Annex to the 1907 Hague Convention IV Respecting the Laws and Customs of War on Land, Jan. 26, 1910, reprinted in Documents On The Law Of War 48 (Adam Roberts and Richard Guelff eds., Oxford University Press 1982).

⁶⁴ Op cit note 38 at 665.

distinction, proportionality and precaution in attack are provided for in the Additional Protocols.

Lawful targeting during armed conflict is based on three main premises. Firstly, belligerents do not have the right to attack the enemy without any limitations.⁶⁵ Secondly, there is a prohibition on launching attacks against civilians.⁶⁶ Lastly, a distinction must always be made between combatants and non-combatants in order to protect the latter from the adverse effects of armed conflict.⁶⁷ As such drone strikes must meet several cumulative conditions in order to be permissible under IHL. The cumulative requirements which must be met in order for drone strikes to be permissible are encapsulated in the *jus in bello* principles of distinction, necessity, precaution and proportionality.

In order to comply with these conditions, drone strikes must be used in accordance with certain guidelines. Firstly, the strikes must only be directed at legitimate military targets. Secondly, careful planning must be conducted in order to prevent incidental harm to persons and objects that are protected. Thirdly, the drone strike must be suspended if a target person is considered *hors de combat* or if it is expected that the attack will cause incidental harm that is excessive. Fourth, drones must not be used to employ force that may be deemed excessive in relation to the military advantage that is sought in an attack. Lastly, prohibited weapons must not be used during drone strikes.

The conditions set out above are not always adhered to when it comes to the use of drones as a means of warfare. For instance, there have been reports of a significant number of civilian deaths where drone strikes have been carried out in Yemen and in the US war against Al Qaeda.⁶⁸ For instance, in January 2013, the US allegedly

⁶⁵ Article 35 Additional Protocol I.

⁶⁶Article 48, AP I; ICJ, Nuclear Weapons Advisory Opinion, paragraph 78: States must never make civilians the object of the attack.

⁶⁷ Article 57(2)(a)(ii), AP I: take all feasible precautions in the choice of means and methods of attack with a view to avoiding, and in any event, minimising, incidental loss of civilian life, injury to civilians and damage to civilian objects’.

⁶⁸‘Death by Drone’, available at <https://www.justiceinitiative.org/publications/death-drone> , accessed on 11 January 2024.

conducted a drone strike on a house containing 19 civilians in the village of Silat al-Jarraah which resulted in civilian deaths.⁶⁹ Reports of similar incidents have followed.

In light of the reports of the high number of civilian deaths during drone strikes it is questionable whether states are adhering to the principles of IHL when conducting drone strikes. Furthermore, the deployment of drones is shrouded in a lot of secrecy and therefore the lack of transparency exacerbates the situation and raises serious concerns in that respect. As a result, the United Nations Human Rights council adopted a resolution in 2014 which was aimed at ensuring transparency from states over the use of armed drones whenever there are alleged violations of International law as a result of their use.⁷⁰ In light of this resolution, it is submitted that there is a need to integrate transparency into the regulation of the use of armed drones as a means of war in order to ensure compliance with IHL principles. How this may be achieved will be tackled later in this dissertation.

This dissertation deals with each of the aforementioned principles in separate chapters in determining the conditions which must be met in order for drone strikes to meet the requirements of legality under IHL and if drones are capable of meeting these requirements. Having determined whether drone strikes comply with each of these principles, the dissertation will also discuss some of the challenges that have been highlighted pertaining to transparency and accountability in cases of violations of the rules of IHL when drones are used to conduct attacks during armed conflict.

7. Conclusion

IHL concerns itself with whether a target was/is a legitimate military target and provides guidelines for how attacks directed at them should be conducted during armed conflict. As such, the use of armed drones during armed conflict is subject to the rules of IHL. Most states that have used drones have argued that their targets were legitimate

⁶⁹ Ibid.

⁷⁰Ensuring use of remotely piloted aircraft or armed drones in counter-terrorism and military operations in accordance with international law, including international human rights and humanitarian law : draft resolution / Azerbaijan, Belarus, Bolivia (Plurinational State of), Cuba, Ecuador, Pakistan, Sri Lanka, Sudan, Switzerland, Venezuela (Bolivarian Republic of), Yemen, available at <https://digitallibrary.un.org/record/768427?ln=en> , accessed on 15 January 2024.

military targets and therefore there is justification for targeting them by drones in IHL.⁷¹ In some ways, drones are a preferable method of warfare compared to other traditional methods of warfare particularly in modern warfare. As the way modern warfare is conducted changes and drone technology advances, it is important that clear parameters are set in order for their use to comply with the existing principles of IHL. The question that this dissertation seeks to answer is whether or not the use of drones conforms with the existing rules of IHL which seek to protect civilians and to investigate the impact the technology has on the observance of the norms of IHL. Not only is drone technology advancing and posing new challenges to existing norms of IHL, it is advancing at a pace that requires the international framework to quickly advance with it.

Each of the different drone systems highlighted above present questions in terms of the ability to conform with IHL principles. However, perhaps the most challenging questions relating to the adequacy of IHL to deal with the use of drones arise from the use of autonomous drones. The potential challenges presented to IHL particularly in the context of semi autonomous and fully autonomous drones are enormous. In order to fully understand these challenges, this chapter has provided information on some of the types of drones that are currently in use and the potential developments thereof in so far as information has been made available to the public by drone developers.

It is frightening that the decision of whether or not one lives or dies could be left entirely up to a drone. Therefore, there is a need for the international community to set drone-specific parameters to govern their correct use in armed conflict and this will be highlighted throughout this dissertation.

III. CHAPTER 3: NECESSITY AND HUMANITY

1. Introduction

The fabric of IHL requires that States that are participating in armed conflict only resort to measures which are necessary in achieving legitimate military objectives.⁷²

⁷¹ Op cit note 16 at 23.

⁷² *Nuclear Weapons Advisory Opinion* supra note 13 para 78; ICTY, *Prosecutor v Galic* (Trial Judgment) IT-98-29-T (5 December 2003) para 51.

Objects which, when attacked, weaken the military of the enemy and may lead to partial or full submission of the enemy or offer a definite military advantage can be considered legitimate military objectives.⁷³ As such, the principle of necessity seeks to prevent unnecessary adverse effects of war such as injury, death or unnecessary suffering.⁷⁴ Consequently, states are prohibited from using weapons which cause unnecessary suffering to combatants and civilians.⁷⁵ Drones must therefore be used in accordance with the principle and it must be determined that they do not cause unnecessary suffering or aggravate the adverse effects of the attack.

In essence, the idea of military necessity can be understood as those measures that are considered indispensable in reaching the objectives of war and are lawful in terms of the laws of war.⁷⁶ This suggests that military necessity requires that the force used in an attack be essential in order to achieve a military objective and that it must be in accordance with the general rules of IHL.⁷⁷

2. The development of the principle of military necessity in armed conflict

The principle of military necessity can be traced as far back as the Lieber Code of 1863. The Lieber code provides that military necessity consists of those measures which are of utmost importance or are indispensable in obtaining the ends of war and are within the confines of law.⁷⁸ The principle is sometimes described as ‘the principle of controlled violence’ as it permits the destruction of property or killing of combatants if it is imperatively important to achieving military objectives of war.⁷⁹ It has been argued that due to the ability of drones to be precise when carrying out attacks, they are an

⁷³ Article 52 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977. Jean-Marie Henckaerts and Louise Doswald-Beck *Customary International Humanitarian Law Volume I: Rules* (2005) 29.

⁷⁴ *Nuclear weapons advisory opinion* supra note 13 para 78.

⁷⁵ *Ibid.*

⁷⁶ Sang targeted killing at 30.

⁷⁷ Sang ‘targeted killing’ at 31.

⁷⁸ Article 14 ‘Instructions for the Government of armies of the United States in the Field (Lieber Code) . 24 April 1863’ available at <https://ihl-databases.icrc.org/en/ihl-treaties/liebercode-1863/article-14?activeTab=undefined>, accessed on 19 August 2023.

⁷⁹ Vivek Sehrawat ‘Legal Status Of Drones Under LOAC and International Law’ (2017) 5 *Penn State Journal of Law & International Affairs* 166 at 181.

ideal weapon in conforming with the notion of “controlled violence”.⁸⁰ The principle of necessity is also apparent in the St Petersburg Declaration where it is provided that the only legitimate objective of states when participating in a war should be to weaken the military of the enemy state and not cause any more unnecessary suffering.⁸¹ Thus, military necessity proscribes acts which result in unnecessary killing or suffering.⁸²

In *The Hostages case*, the American Military Tribunal rejected the argument justifying the reprisal killing of civilians and described the practical application of the principle of necessity in the following manner:

“Military necessity permits a belligerent, subject to the laws of war, to apply any amount and kind of force to compel the complete submission of the enemy with the least possible expenditure of time, life and money. In general, it sanctions measures by an occupant necessary to protect the safety of his forces and to facilitate the success of his operations. It permits the destruction of life of armed enemies and other persons whose destruction is incidentally unavoidable by the armed conflicts of the war ; it allows the capturing of armed enemies and others of peculiar danger, but it does not permit the killing of innocent inhabitants for purposes of revenge or the satisfaction of a lust to kill. The destruction of property to be lawful must be imperatively demanded by the necessities of war. Destruction as an end in itself is a violation of International Law. There must be some reasonable connection between the destruction of property and the overcoming of the enemy forces...”⁸³

⁸⁰ Cristiano Greco ‘Drone Warfare and The Law of Armed Conflict Analysis on The Humanitarian Concerns Raised By The Use of Armed Drones’ available at https://mondointernazionale.org/documenti_associazione/drone-warfare-and-the-law-of-armed-conflict-analysis-on-the-humanitarian-concerns-raised-by-the-use-of-armed-drones/Drone-Warfare-and-the-LOAC.pdf, accessed on 21 January 2024 at 14.

⁸¹ Declaration Renouncing the Use, in Time of War, of Explosive Projectiles Under 400 Grammes Weight. Saint Petersburg, 29 November/ 11 December 1868 available at <https://ihl-databases.icrc.org/en/ihl-treaties/st-petersburg-decl-1868/declaration?activeTab=undefined> accessed on 21 August 2023.

⁸² Schmitt, Michael N ‘Military Necessity and Humanity in International Humanitarian Law: Preserving the Delicate Balance’ (2010) 50 *Virginia Journal of International Law* 795 at 797.

⁸³ *The Hostages Case (United States v List and others)* (1980) 8 WCR 34.

Thus, a party to a conflict is prohibited from killing for revenge or any other reason other than achieving military objectives and the attack must be carried out within the confines of all other rules of IHL. Therefore when a drone strike is carried out, a connection between the actual attack and defeating the enemy forces must be established in order for the strike to be compliant with the principle of military necessity.

3. Key elements of necessity

Military necessity is encapsulated within the following key elements:

“a) the force used can be and is being controlled; b) since military necessity permits the use of force only if it is ‘not otherwise prohibited by the law of armed conflict’, necessity cannot excuse a departure from that law; c) the use of force in ways which are not otherwise prohibited is legitimate if it is necessary to achieve, as quickly as possible, the complete or partial submission of the enemy; d) conversely, the use of force which is not necessary is unlawful, since it involves wanton killing or destruction.”⁸⁴

The above elements highlight that whichever weapon is used in armed conflict must be such that its effects are controllable and only limited to achieving legitimate military objectives. Furthermore, even if a certain action is necessary in achieving that specific military objective, compliance with the other rules of international law is still required. In other words a drone strike may not be carried out without due regard to the other rules of international law simply because it will result in overcoming the enemy. Wilful and random acts of violence are strictly prohibited. Thus, drone strikes must be conducted in a manner that complies with the above elements in order to comply with the principle of military necessity.

4. Military necessity and targeting by drones

⁸⁴The Joint Service Manual of The Law of Armed Conflict para 2.2.1 available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/27874/JSP3832004Edition.pdf accessed on 22 August 2023.

As briefly highlighted in previous sections, targeting operations are driven by military necessity.⁸⁵ According to Article 52 of Geneva Protocol I, armed attacks must only be directed at military objectives and must give a definite military advantage.⁸⁶ This reflects customary international law.⁸⁷ In the same vein, Article 23 of the Hague IV prohibits the destruction and seizure of enemy property unless it is “imperatively demanded by the necessities of war.”⁸⁸ The question that arises in case of drones is whether drone strikes are essential in terms of achieving specific military objectives. In that respect, it has been argued that in modern day warfare, drones have become an invaluable weapon. This suggests that they have become a necessary tool in achieving specific military objectives, taking into consideration the shift in the way in which modern day war is conducted. For instance, drones have become popular in carrying out attacks against alleged ‘terrorist’ groups particularly due to the fact that military ground forces are unable to reach the areas in which ‘terrorists’ mostly base their operations.⁸⁹ In those instances, drones become the only way in which attacks can be carried out against enemy forces because of their ability to locate and identify targets through reaching those areas which are inaccessible to ground forces for different reasons.

It would therefore be argued that carrying out an attack against an enemy in areas that would perhaps be inaccessible but essential to enemy operations would constitute a military advantage and therefore gives rise to military necessity. The inaccessible areas are essential to planning and training and are therefore military objectives which when attacked would give a definite military advantage. However, it should be noted that this is one instance in which the use of drones is a matter of military necessity. The assessment should be made on a case-by-case basis taking into account all the relevant factors existing at the time. Like any other weapon, it must be ascertained that the use of a drone in carrying out an attack offers a definite military advantage in achieving specific military goals.

⁸⁵ Vogel ‘drone warfare unmanned aerial systems’ at 115.

⁸⁶ Ibid.

⁸⁷ Ibid.

⁸⁸ It is also important to note that in terms of Article 8 of the Rome Statute, destroying enemy property unless it is imperatively demanded by the necessities of war can constitute a war crime.

⁸⁹ Op cit note 85.

5. Humanity

Although the nature of war may bring about injury and/or death, the ultimate objective is not to cause unnecessary harm.⁹⁰ It follows that IHL allows combatants to kill or injure but only when it is necessary or cannot be avoided. Consequently, belligerents are obliged to use weapons that are humane and which do not cause unnecessary suffering and/or pain.⁹¹ The principle of humanity is therefore derived from the idea that pain and suffering must not be inflicted unnecessarily despite the fact that IHL allows killing or injuring during armed conflict. It is the idea of humanity in which the prohibition of the use of indiscriminate weapons emanates.⁹² The question that arises is whether drones can be considered a humane means of warfare and whether drone strikes conform to the principle of humanity.

It has been argued that drone strikes may fall short of conforming to the principle of humanity because of the 'videogame mentality' of drones which is due to the fact that the drone operator is far removed from the battlefield. Some scholars argue that the possibility of causing unnecessary harm is increased by the fact that the drone operator is physically and emotionally removed from the intended target.⁹³ Furthermore, it has also been argued that drones defy the principle of humanity by not affording belligerents the opportunity to surrender. Surrendering to a drone is almost impossible and therefore a drone operator may very well end up inflicting unnecessary pain even in instances where belligerents may have surrendered.

6. The practicability of surrendering to a drone

The difficulty of drones in affording the opportunity to surrender is exemplified by several cases in which drones have been used. For instance, in 2009, an operation was carried out by the US in which Baitullah Mehsud was killed by a drone.⁹⁴ In that

⁹⁰ Chengeta thesis at 46.

⁹¹ Ibid.

⁹² Ibid.

⁹³ Ibid.

⁹⁴ Jane Mayer 'The Predator war, What are the risks of the CIA's covert drone program? Available at https://urbanpolicy.net/wp-content/uploads/2012/11/091026_Mayer_NewYorker_ThePredatorWar.pdf?form=MG0AV3 , accessed on 25 August 2024. Ahmed Rashid 'The Afghan impasse' available at <https://www.nybooks.com/articles/2009/10/08/the-afghanistan-impasse/?form=MG0AV3> accessed on 20 September 2023.

instance, Mehsud was killed whilst he was receiving treatment for a kidney ailment.⁹⁵ Because of his illness, it may be argued that he had become *hors de combat* and therefore should not have been targeted in the first place. It can also be argued that the extent of his illness had made it possible that he would have surrendered had he been given the opportunity to do so. However, because the attack was carried out by drone, he did not get the opportunity to surrender and as a result he and approximately 12 other people were superfluously killed. This incident can be argued to have been an instance where a drone strike violated the principle of humanity as it arguably caused unnecessary pain and suffering. Had the attacker not been far removed from the situation, there was a possibility that this could have been avoided and Mehsud could have surrendered.

Although it is difficult for belligerents to surrender to a drone or drone operators and the drone itself to recognise the surrender, it has been argued by some scholars that it is not entirely impossible. This is due to the technological capabilities of drones such as the high resolution cameras, ability to manoeuvre at lower altitudes and the ability to hover in the same area for long periods.⁹⁶ These capabilities have been identified as advantageous compared to conventional manned aircraft in the enabling surrender.⁹⁷ The ongoing conflict between Ukraine and Russia has involved the use of drones in ways that have not been seen before and alleged instances of belligerents surrendering to drones have been recorded.⁹⁸ The Ukrainians have created the 'I want to live' program in which Russian soldiers can follow instructions on how to surrender to a Ukrainian drone. In such instances the Russian soldier is given instruction to go to a certain rendezvous and waits for contact with a Ukrainian drone.⁹⁹ Once contact is established, the Russian soldier is expected to maintain visual contact with the drone with his hands up signifying surrender. The drone operator in turn moves the drone up and down to acknowledge the surrender and the Russian soldier is then led by the

⁹⁵ Ibid.

⁹⁶ Victor Melin *IHL And Drone-Enabled Surrender* (LLM Thesis, Swedish Defence University, 2023) 33.

⁹⁷ Ibid.

⁹⁸ William Casey Biggerstaff and Caitlin Chiaramonte 'Ukraine Symposium - The Legal and Practical Challenges of Surrendering To Drones' *Lieber Institute West Point*, February 8, 2023 available at <https://lieber.westpoint.edu/legal-practical-challenges-surrender-drones/>, accessed on 27 December 2023.

⁹⁹ Ibid.

drone to another safe area in which Ukrainian soldiers wait to take him in as a prisoner of war.¹⁰⁰ It is, however, uncertain how many Russian soldiers have surrendered in this manner.¹⁰¹

Although it is not impossible to surrender to a drone as illustrated above, it is difficult to determine its practicability at every instance. The intention to surrender must be clear on the part of the surrendering party. This may be difficult to interpret from the point of view of the attacker. For instance, the attacker might not necessarily interpret the other party putting down arms as a signal for surrender. The drone operator on the other side might interpret it as an opportunity to strike as it would be easy to do so. If it is not a pre-planned surrender, then the other party might seal their demise by putting down arms. On the other hand, even when the surrender is pre-planned, circumstances might change in the process which may result in the fatality because there would be no clear ongoing communication between the drone operator and the surrendering party which would allow the drone operator the opportunity to understand that although the prevailing circumstances have changed, the other party still wishes to surrender. As a result, the drone operator may fire out of panic if the pre-planned instructions are not strictly followed.

7. Conclusion

The use of drones in warfare presents significant legal, ethical, and practical challenges, particularly in relation to the principles of military necessity and humanity under IHL. Drones offer unique capabilities for surveillance, intelligence gathering, and targeted strikes, providing military advantages that can be crucial in modern conflicts. However, the deployment of drones must be carefully evaluated to ensure compliance with IHL.

One of the critical issues highlighted in this chapter is the potential for drones to cause unnecessary suffering, as their operators are far removed from the battlefield. The case of Baitullah Mehsud exemplifies how the detachment of drone operators can

¹⁰⁰ Ibid.

¹⁰¹ Ibid.

lead to violations of the principle of humanity, as the opportunity for surrender was not afforded, resulting in unnecessary casualties. Despite technological advancements that enhance the capabilities of drones, such as high-resolution cameras and the ability to hover, the practicability of surrendering to a drone remains a complex issue. While programs like Ukraine's "I want to live" initiative illustrate that surrender to drones is not entirely impossible, the lack of clear communication and the potential for misinterpretation can lead to unintended fatalities.

The ongoing development and use of drones in military operations necessitates a robust regulatory framework to address these challenges. This chapter has emphasised the need for continued international efforts to regulate drone usage in line with IHL to safeguard the principles of justice and humanity in contemporary warfare.

IV. CHAPTER 4: THE PRINCIPLE OF DISTINCTION

1. Introduction

The principle of distinction is one of the cardinal rules of customary International Humanitarian Law which is applicable during armed conflict.¹⁰² Whether a conflict is an International or non-international armed conflict, the principle of distinction applies.¹⁰³ The principle provides that parties to an armed conflict must distinguish between combatants and non-combatants at all times.¹⁰⁴ Attacks must only be directed at combatants and not civilians.¹⁰⁵ Consequently, parties to a conflict are prohibited from using weapons that are incapable of distinguishing between civilians and combatants or military targets.¹⁰⁶ This implies that the use of indiscriminate weapons and carrying out indiscriminate attacks is prohibited.¹⁰⁷ Drones must therefore be capable of making the

¹⁰² Op cit note 73 at 3. *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion* supra note 13 para 78.

¹⁰³ Op cit note 73 at 3.

¹⁰⁴ *Nuclear Weapons Advisory Opinion* supra note 13 para 78.

¹⁰⁵ Op cit note 73 at 3.

¹⁰⁶ *Nuclear Weapons Advisory Opinion* supra note 13 para 78.

¹⁰⁷ How Does Law Protect in War available at <https://casebook.icrc.org/glossary/distinction> (accessed 12 December 2017).

distinction between combatants and civilians and must not be indiscriminately used in order to comply with the principle.¹⁰⁸

Bearing in mind that the principle of distinction is a fundamental principle of IHL, naturally IHL favours weapons or weapon systems that enhance the ability to distinguish between civilians and combatants.¹⁰⁹ This is a subject of debate when it pertains to drones. This chapter explores the differing views on whether or not drones are capable of complying with the principle of distinction. The first part of the chapter explores the fundamental aspects of the principle of distinction under IHL which are essential in examining whether drones comply with the principle. The second part of the chapter then moves on to the discussion on drones and whether or not they comply with the principle of distinction while highlighting the aspects of drone technology which make them conform to the principle and the drawbacks that arise in ensuring compliance.

2. The principle of distinction under IHL

In its *Nuclear Weapons Advisory Opinion*, the International Court of Justice asserted that the cardinal rules of IHL which include the principle of distinction must be “...observed by all States whether or not they have ratified the conventions that contain them because they constitute intransgressible principles of international customary law”.¹¹⁰ This suggests that during armed conflict, parties to the conflict are not allowed to deviate from complying with the principle of distinction.

The principle of distinction is perhaps the most fundamental principle in IHL as it is at the core of the other IHL principles.¹¹¹ For instance, the obligation to conduct attacks in a proportionate manner depends on the ability to distinguish between legitimate military targets and civilians.¹¹² In that regard, it must first be determined who is participating in hostilities and who is not in order to determine whether an attack would

¹⁰⁸Op cit note 16 at 23.

¹⁰⁹ C Greco ‘Drone Warfare and The Law Of Armed Conflict Analysis on the humanitarian concerns raised by drones at 10.

¹¹⁰ *Nuclear Weapons Advisory Opinion* supra note 13 para. 79.

¹¹¹ Michael W. Lewis and Emily Crawford ‘Drones and Distinction: How IHL Encouraged the Rise of Drones’ (2013) 44 *Georgetown Journal of International Law* 1127 at 1127.

¹¹² Crawford ‘The Principle of Distinction and Remote Warfare’.

be proportionate. Moreover, making the distinction between combatants and civilians is also an integral part of the necessity inquiry. The principle of necessity prohibits attacks which are not necessitated by the essentialities of armed conflict and do not in any way provide a military advantage.¹¹³ This requires that an attacker first make the distinction of what may constitute a military objective and whether or not it is essential in achieving a military advantage. An attacker must therefore be able to make a distinction between civilians and combatants before carrying out other assessments in relation to an intended attack. Thus, the principle of distinction is both complementary and integral to proportionality and necessity assessments under IHL.¹¹⁴

The principle of distinction is implicitly present or directly in the majority of IHL instruments.¹¹⁵ Although the Hague Regulations of 1899 and 1907, or the Geneva Conventions of 1949 do not make explicit mention of the principle of distinction, it is nonetheless implicit in some provisions.¹¹⁶ For instance, Article 25 of the Hague Regulations prohibits attacking undefended villages, towns, habitations or buildings. This requires a distinction to be made between legitimate military targets and those that may not be targeted because those mentioned in this provision are not considered as legitimate targets. Moreover, the Geneva Conventions prohibit violence against persons who are not taking part in hostilities. In that regard, it follows that a distinction must be made between those participating in hostilities and those who are not. The Fourth Geneva Convention of 1949 pays attention to the protection of civilians and civilian objects against consequences of armed conflict. This is provided for in article 18 which prohibits attacks on civilian hospitals¹¹⁷ and article 33 which concerns collectively punishing protected persons and their property.¹¹⁸ The protection of civilians and civilian

¹¹³ Article 23 (g) Hague Convention IV.

¹¹⁴ Op cit note 47 at 107.

¹¹⁵ Crawford 'The Principle of Distinction and Remote Warfare'.

¹¹⁶ Op cit note 73 at 3.

¹¹⁷ Article 19 of the Fourth Convention provides: 'The protection to which civilian hospitals are entitled shall not cease unless they are used to commit, outside their humanitarian duties, acts harmful to the enemy. Protection may, however, cease only after due warning has been given, naming, in all appropriate cases, a reasonable time limit, and after such warning has remained unheeded.'

¹¹⁸ Article 33 of the Fourth Convention provides: 'No protected person may be punished for an offence he or she has not personally committed. Collective penalties and likewise all measures of intimidation or of terrorism are prohibited. Pillage is prohibited. Reprisals against protected persons and their property are prohibited.'

objects in the Hague regulations and in the Geneva Conventions is in line with the principle of distinction which prohibits attacks against civilians and civilian objects. Thus, although the principle is not expressly stated, it is implicit from these provisions.

The principle of distinction finds express codification in the Additional Protocols of 1977. Article 48 of Additional Protocol I states that:

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

This provision is the first instance in which the principle of distinction was expressly codified. A number of other provisions in the Additional Protocols reaffirm the principle as it forms the basis for a number of these other provisions.¹¹⁹ The emphasis in these provisions is that attacks must only be directed at combatants and therefore a clear distinction must be made between those participating in hostilities and those who are not. There are also several other instruments and other sources in which the principle of distinction is either implicit or expressly stated.¹²⁰ These are not relevant to this discussion and will therefore not be discussed in detail in this chapter. It suffices to say that the principle has become a part of customary international law and must be respected by all parties to an armed conflict as highlighted in the *Nuclear Weapons Advisory Opinion*.¹²¹

¹¹⁹ For instance, article 51 of Additional Protocol I which provides that “The civilian population and individual civilians shall enjoy general protection against dangers arising from military operations. The civilian population as such, as well as individual civilians, shall not be the object of attack. Acts or threats of violence the primary purpose of which is to spread terror among the civilian population are prohibited. Civilians shall enjoy the protection afforded by this Section, unless and for such time as they take a direct part in hostilities”.

¹²⁰ An example of support for the principle of distinction can be found in 1965 Vienna Resolution XXVIII which was adopted by the 20th International Conference of the Red Cross and Red Crescent. It was declared in that Resolution that all parties involved in armed conflict should, *inter alia*, comply with the principle that parties to an armed conflict must distinguish between members of the civilian population and persons taking part in hostilities at all times and civilians must be spared as much as possible.

¹²¹ *Nuclear Weapons Advisory Opinion* para 78-79.

In essence, the ability to lawfully target individuals during armed conflict depends on the status of the target.¹²² Distinguishing between civilians and combatants is therefore a requirement for lawful targeting during armed conflict.¹²³ One must first determine who is considered a combatant and who is considered a civilian under IHL in order to determine who may be targeted by way of drones. The status of the object determines whether the object can be targeted or not. If the object is civilian, it cannot be attacked. An object can only be attacked if it is a military objective.¹²⁴ Parties to a conflict can ensure that they comply with the principle of distinction by following certain guidelines when conducting attacks or military operations. The obvious way of ensuring compliance is by directing attacks only at military objectives. Thus, before conducting an attack, the attacker must carry out the necessary investigations and gather sufficient intelligence to determine that the proposed target is indeed a legitimate military objective and not civilian. Furthermore, taking precaution in attacks plays a major role in ensuring that civilians are not made victims of the attack. Parties to the conflict must therefore seek to protect civilians by ensuring that they do not place military objects within the vicinity of civilians.

3. Combatant status

Combatant status only exists in international armed conflict and not in national armed conflict.¹²⁵ Under IHL, all members of the armed forces including irregular or paramilitary forces incorporated into the armed forces taking part in an armed conflict are considered to be combatants except religious and medical personnel.¹²⁶ Although religious and medical personnel may be members of the armed forces, they are not considered to be combatants.

4. Civilian status

¹²² Waseem Ahmad Qureshi 'The Legality and Conduct of Drone Attacks' (2017) 7 *Notre Dame Journal of International & Comparative Law* 91 at 99.

¹²³ Waseem Ahmad Qureshi 'The Legality and Conduct of Drone Attacks' at 99.

¹²⁴ Article 52(2) of Protocol I defines military objectives as 'those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralisation, in the circumstances ruling at the time, offers a definite military advantage.'

¹²⁵ *Supra* note 73 at 11.

¹²⁶ ICRC Customary IHL available at https://ihl-databases.icrc.org/customary-ihl/eng/docs/v1_rul_rule3 accessed on 8 December 2023. It must also be noted that combatant status is only afforded in armed conflict.

Although the Fourth Geneva Convention of 1949 is dedicated to the protection of civilians, it does not contain an express definition of civilian. Additional Protocol I was the first instrument in which there was an attempt to define 'civilian' in relation to the rules of armed conflict. Article 50 of Additional Protocol I provides that:

"A civilian is any person who does not belong to one of the categories of persons referred to in Article 4 A 1), 2), 3) and 6) of the Third Convention and in Article 43 of this Protocol."

Read together with the other articles provided for in the provision, article 50 (1) defines a civilian by providing that civilians are persons who are not combatants. Thus, in accordance with article 50 (1), persons who are not members of any group forming the armed forces of the party to the conflict are considered civilians. Civilians are therefore a residual group in which all those who are not combatants are considered civilians. It should also be noted that the provision also gives further protection to non-combatants by providing that if there is any doubt as to whether or not a person is a civilian then they should be considered to be civilian.¹²⁷

5. Civilian objects and military objectives

An object can be considered a legitimate target for several reasons. These reasons relate to the object being of a military advantage to the enemy. For instance, objects of a military nature such as a military base or military vehicles are obvious legitimate targets. However, there are other objects which can be considered legitimate targets during armed conflict which are not necessarily of a military nature. For instance, if an object such as a school is used by the enemy to launch attacks it loses protection and becomes targetable. The presence of civilians in that area, however, is always an important consideration in determining whether or not an attack should be conducted because intentionally targeting civilians is prohibited at all times. Furthermore, members of the enemy armed forces that are participating in the armed conflict can be targeted because of their status as a member of the enemy force which makes them a combatant.

¹²⁷ Article 50(1) Additional Protocol I.

Civilian objects are also similarly defined in the negative. Article 52(1) of Additional Protocol I provides that “Civilian objects are all objects which are not military objectives...”¹²⁸ Civilians are prohibited from participating in hostilities. The only exception to this prohibition is in cases where they participate as *levée en masse* in which case they would be regarded as belligerents with the fulfilment of certain conditions such as carrying weapons openly and complying with the rules of war.

Article 52(2) of Additional Protocol I describes what may be considered a military objective. It provides that:

“In so far as objects are concerned, military objectives are limited to those objects which by their nature, location, purpose or use make an effective contribution to military action and whose total or partial destruction, capture or neutralisation, in the circumstances ruling at the time, offers a definite military advantage.”¹²⁹

Thus, drone strikes should only be limited to objects which fall into the description provided for in article 52(2) of Additional Protocol I as highlighted above. Furthermore, where there is doubt whether or not a person is a combatant, that person must be considered a civilian- Additional Protocol I Article 50(1). Article 52 (3) likewise provides that where there is doubt whether an object is used as a military objective, it must be considered a civilian object.¹³⁰

While civilians have *prima facie* immunity from being attacked, they can lose their protection if they are actively taking part in hostilities.¹³¹ This is encapsulated in article 51(3) of Additional Protocol I which provides that “Civilians shall enjoy the protection afforded by this section, unless and for such a time as they take direct part in hostilities”.¹³² This means that civilians are protected until a time when they are directly participating in hostilities in which case they can be targeted because they will be contributing to the military advantage of the enemy by performing military functions. The

¹²⁸ Article 52 (1) AP I.

¹²⁹ Article 52 (2) AP I.

¹³⁰ Article 52 (3) AP I.

¹³¹ Article 51(3) of AP I.

¹³² *Ibid.* Article 13 (3) Additional Protocol II.

special protection that civilians enjoy is forfeited when they directly participate in hostilities. It is important to note, however, that civilians who unlawfully participate in hostilities do not become combatants. They remain civilians although participating unlawfully in hostilities.

The meaning of direct participation in hostilities is unclear. However, it is suggested that this could mean an intention on the part of the civilian to harm the armed forces on the opposite side of the armed conflict while giving an advantage to the other.¹³³ Thus, similar to civilian objects which are used for purposes of military benefit during armed conflict, a civilian may be considered a lawful target in certain instances particularly where they directly take part in acts of war which by nature would cause harm or destruction to the enemy forces.¹³⁴ It must be noted that when civilians cease to participate in hostilities, they retain their protection as civilians and cannot be lawfully targeted.¹³⁵ These factors must be taken into consideration when determining whether drones comply with the principle of distinction. That is, can they be used to distinguish between the several types of legitimate targets and civilians during armed conflict?

The next part of this chapter highlights the factors which make drones capable of complying with the principle of distinction while pointing out some of the challenges which drones may have in ensuring compliance with the principle. The question that arises with respect to drones is whether or not they are able to distinguish between persons directly participating in hostilities as would a fighter who is involved in actual battle on the ground. This will be examined in the discussion on the technology of drones in relation to the principle of distinction which follows.

6. Can drones distinguish between civilian and military targets?

Before an attack is launched by way of a drone, the attacker must “do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian

¹³³ Protocol Additional to the Geneva Conventions of 12 August 1949 , and relating to the Protection of the Victims of International Armed Conflicts (Protocol I) 8 June 1977. Commentary of 1987 available at <https://ihl-databases.icrc.org/en/ihl-treaties/api-1977/article-51/commentary/1987?activeTab=undefined> ,Accessed on 12 February 2024.

¹³⁴ Ibid.

¹³⁵ Ibid.

objects”.¹³⁶ On paper, drones have the capacity to carry out this assessment. As highlighted in the earlier sections of this dissertation, they have the ability to monitor a target for long periods of time which could mean that the process of information gathering and determining what can be lawfully targeted is more refined. Furthermore, drones are capable of providing high quality imagery through their high resolution cameras. This allows the operator the opportunity to clearly assess the situation on the ground by determining who is a lawful target and who is not before carrying out an attack.

Moreover, it has been argued that the fact that drone operators are at a remote location and not directly in the hostilities where they can be attacked aids in ensuring compliance with the principle.¹³⁷ This is due to the fact that they are relieved of the pressure of being in direct combat, they are able to make more thorough assessments of what can be lawfully targeted. Also, due to the fact that drones are able to hover around for long periods, the operators do not have to destroy a potential target at first glance.¹³⁸ Instead, they have the time to gather more information about the surroundings before carrying out an attack and this aids in the determination of whether or not a potential target may be a legitimate military target. This in turn minimises the possibility of attacks that are indiscriminate.¹³⁹ The technological capabilities that drones are equipped with therefore help in ensuring compliance with the principle of distinction.

Although drones offer several ways in which they can enhance compliance with the principle of distinction, their deficiencies must not be ignored. It has been argued that drone warfare has significant drawbacks in terms of compliance with the principle of distinction. Despite the distinct advantages of drones in ensuring compliance, their employment does not always result in strict compliance. Seemingly, some of the advantages are paradoxically also their drawbacks in ensuring compliance with the principle of distinction. For instance, contrary to what has been outlined above, it has been argued that the remoteness of drone attacks makes it hard to comply with the

¹³⁶ Article 57(2)(a) AP I.

¹³⁷ S Wuschka ‘The Use of Combat Drones in Current Conflicts-A Legal Issue or a Political Problem?’ page 895-96.

¹³⁸ Ibid 896.

¹³⁹ Ibid.

principle of distinction.¹⁴⁰ This is partly due to the fact that the attacker or the drone operator is usually not in close proximity to the attack. Some argue that this diminishes the ability of the attacker to clearly make a distinction assessment before carrying out an attack. For instance, it may be difficult to ascertain whether someone is openly carrying arms from a video that is shot by a drone that is kilometres above the target due to bad weather conditions or something of a similar nature.

The remoteness of the attack has also been seen by some scholars as a drawback in ensuring compliance with the principle. There are several documented indiscriminate attacks in which the principle of distinction was violated and it was attributed to the remote nature in which drones are operated.¹⁴¹ Furthermore, despite the fact that drones produce high resolution imagery, in some instances it may not be enough to identify the target as a legitimate target. This may result in misidentification, which would be a violation of the principle of distinction. A person may appear to be participating in hostilities or appear to be a target that the attacker is planning to attack and yet it may be a civilian. For example, in February 2002, a drone strike which was carried out in the city Khost, Afghanistan resulted in the killing of three innocent civilians.¹⁴² The drone that was used in this instance had spotted the three men and one of the men was misidentified as Osama Bin Laden. Hellfire missiles were fired which resulted in the death of all three men. It then turned out that the three men were innocent civilians and the man that was thought to be Osama bin Laden was just another civilian.

The incident which occurred in Khost as cited above was the first known case of what is known as 'signature strikes' whereby a strike was carried out based on the activity or certain signatures without confirmation of the identities of the intended

¹⁴⁰Emily Crawford 'The Principle of Distinction and Remote Warfare' (2016) available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2785454, accessed on 6 December 2017.

¹⁴¹The Bureau of Investigative Journalism 'Pakistan: Reported US Strikes 2010' available at <https://www.thebureauinvestigates.com/drone-war/data/obama-2010-pakistan-strikes/?form=MG0AV3>, accessed on 12 December 2024. Nidaa Iqbal 'The principle of distinction and drone strikes: an IHL accomplishment or an IHL failure?' , available at <https://rsilpak.org/2022/the-principle-of-distinction-and-drone-strikes-an-ihl-accomplishment-or-an-ihl-failure/?form=MG0AV3>, accessed on 12 December 2023.

¹⁴² K Heller 'One Hell of a Killing Machine: Signature Strikes and International Law' (2013) 11 *Journal of International Criminal Justice* at 1 .

targets. Since then, several other 'signature strikes' have been carried out.¹⁴³ In such instances, this would be contrary to the obligation to distinguish between civilians and combatants as the principle requires certainty and not suspicion that the intended target is legitimate. The point to be made here is that compliance with the principle heavily relies on visual assessments and in situations where drones do not provide clear images, it may result in a violation of the principle of distinction if an attack based on unclear footage results in harm to civilians.

Moreover, the drone operator has to rely on the live video feed whilst seating at a remote location and decide whether or not an object qualifies as a legitimate target. In that regard, it has been highlighted that the precision and clarity that is offered by drones through the video feed to the operator is undermined by the problem of latency. The delay in which the data is transferred through satellite from the drone to the operator may cause mistakes since the circumstances on the ground may slightly shift in that period of delay. This opens up the possibility of not being able to comply with the principle of distinction because the target may move around in an area that is heavily populated with civilians.

Although drones can perform some autonomous functions, they are in most cases ultimately guided by an operator, often referred to as 'man in the loop'.¹⁴⁴ Hence, some prefer referring to drones as 'uninhabited' to unmanned as humans still enjoy some significant amount of control during operations.¹⁴⁵ At a certain point during an operation, the man in the loop may cease to have control.¹⁴⁶ In instances where human control has ceased, drones have onboard sensors and through machine learning, they are capable of processing data through algorithms which are installed in advance by the operator which determine whether or not to finalise the attack.¹⁴⁷ In such circumstances, the operator must ensure that the installed program's mechanism is able to distinguish

¹⁴³D Cloud, 'CIA Drones Have Broader List of Targets' *Los Angeles Times*, 5 May 2010 available at <https://www.latimes.com/world/la-xpm-2010-may-05-la-fg-drone-targets-20100506-story.html>, accessed 10 May 2023.

¹⁴⁴Op cit note 16 at 9.

¹⁴⁵ Op cit note 47at 4.

¹⁴⁶ Yoram Dinstein 'The Principle of Distinction and Cyber War in International Armed Conflicts' (2012) 17 *Journal of Conflict and Security Law* 261 at 268.

¹⁴⁷ Ibid. Supra note 16 at 9.

between what is civilian and what is a legitimate military target.¹⁴⁸ In most instances, however, the operator has control until the final stages of executing an attack. Thus, the operator would still be able to abort the attack if for instance circumstances such as a sudden presence of civilians in the area in which the target is located. However, as previously highlighted, the issue of latency presents a significant challenge with respect to the ability of the drone operator to abandon an attack as a result of a sudden appearance of civilians within the vicinity of the intended target. As a result an attack may become fatal for civilians if as a result of latency, the operator is unable to abandon the attack. Such an instance would certainly result in a violation of the principle of distinction.

7. Indiscriminate attacks

In line with the principle of distinction, IHL also prohibits indiscriminate attacks¹⁴⁹ or the use of methods which the effects cannot be controlled.¹⁵⁰ An attack may be considered to be indiscriminate if the weapon used is incapable of accurately striking a specific target. This was highlighted in *Prosecutor v Milan Martić* in which the International Tribunal found that the weapon used in attack was indiscriminate due to high dispersion characteristic which made it incapable of hitting specific targets.¹⁵¹ On paper, drone attacks seem to conform to these proscriptions. As ‘precision weapons’, drones are capable of discriminating between civilians and combatants while directing attacks at specific targets.¹⁵² However, the incidental loss of civilian lives remains a possibility. As previously highlighted, the weapon itself may be capable of firing with precision but the way in which it is employed may constitute an indiscriminate attack. Therefore a proportionality assessment must be carried out thereafter in order to balance the military advantage sought in relation to the anticipated collateral damage to

¹⁴⁸ If the drone releases a missile and hits a target without complying with the principle of distinction, it raises questions on whether or not it was due to human error or technological errors of the drone itself or perhaps an intention on the part of the operator to strike at civilians. This question is dealt with at a later stage in the chapter on liability.

¹⁴⁹ Article 51(4) AP I. Article 51(5) (b) AP I.

¹⁵⁰ Article 51 (4) (c) AP I.

¹⁵¹ *Prosecutor v Milan Martić* International Tribunal for the Prosecution of Persons Responsible for Serious Violations of International Humanitarian Law Committed in the Territory of Former Yugoslavia since 1991 para 463.

¹⁵² Op cit note 47 at 108.

civilians. The details of how proportionality assessments are carried out are laid out in the chapter on proportionality ahead.

8. Conclusion

The question that arises with respect to drones is whether they have the ability to distinguish between civilians and combatants. In order to answer this question, this chapter has outlined how IHL requires parties to a conflict to distinguish between who may be targeted and who may not be targeted. The chapter also highlighted the capabilities that drones possess and determined whether or not they are able to make the necessary distinctions in order to comply with the rules of lawful targeting.

Having highlighted the capabilities of drones and their drawbacks, it must be determined whether they in fact comply with the principle of distinction. To an extent the ability of drones to provide broad surveillance and integrate complex data analysis enhances the possibility of accurately distinguishing between civilians and combatants thereby complying with the principle of distinction. Where such accurate assessments are followed through by precision killing or targeting, it can be argued that drones embody the main goal of IHL which is direct lethal attacks to legitimate military targets and spare civilians. However, while the weapons themselves may comply with the principle of distinction, the possibility of non-compliance through the way in which they may be used is still there. In other words, drones could still be used indiscriminately and thereby violating the principle of distinction. In essence, as explored in this chapter, drones have the potential to notably comply with the principle of the distinction but they are not perfect and there are significant drawbacks in the way in which they are employed.

V . CHAPTER 5: PROPORTIONALITY

1. Introduction

When a legitimate military target has been identified during armed conflict, an assessment of the effects that such an attack may have on civilians and civilian objects must be carried out in order to determine whether such an attack would be in line with

the proportionality principle.¹⁵³ The principle of proportionality is a part of international customary law and is one of the fundamental principles of IHL.¹⁵⁴ Under IHL the proportionality assessment involves weighing military benefit against potential harm to civilians.¹⁵⁵ It has been argued that drones cause less collateral damage and minimise risk to non-combatants when used to attack legitimate military targets.¹⁵⁶ This suggests that the use of drones would likely pass the assessment of proportionality.

The crux of the argument that is put forward by proponents of drones is that drones offer several technological advantages which enable them to adhere to proportionality standards by reducing the risk of harm to civilians. For instance, officials from the United States of America have stated that attacking particular military targets with advanced technologies such as drones serves the purpose of preventing harm to civilians.¹⁵⁷ There is, however, wide disagreement with this assertion from critics of the use of drones.¹⁵⁸ Some scholars question whether drones can truly conform to the principle of proportionality considering the amount of damage that often results from drone attacks.¹⁵⁹ This chapter gets into this debate and examines whether drones can truly conform to the proportionality principle under IHL.

2. Proportionality under IHL

While it is the prerogative of the parties to an armed conflict to determine the means and methods of warfare, such prerogative exists with limitations.¹⁶⁰ One such limitation comes in the form of the principle of proportionality. Article 35 of Additional Protocol 1 requires that the parties to a conflict check the legality of the weapon to be used and use it in accordance with the principles of IHL and that includes the principle

¹⁵³ Thompson Chengeta Thesis 54.

¹⁵⁴ Op cit note 73 at 46.

¹⁵⁵ Rachel Alberstadt 'Drones under International Law' (2014) 4 *Open Journal of Political Science* 221 at 227.

¹⁵⁶ Megan Braun and Daniel R. Brunstetter 'Rethinking the Criterion for Cia-targeted Killings: Drones, Proportionality and Jus Ad Vim' (2013) 12 *Journal of military ethics* 304 at 304.

¹⁵⁷ Vogel at 126.

¹⁵⁸ *ibid* .

¹⁵⁹ Op cit note 156 at 304.

¹⁶⁰ Article 35(1) Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol 1).

of proportionality.¹⁶¹ The principle of proportionality is applied in instances where it is impossible to prevent civilian harm when attacking a lawful target during armed conflict. The principle is based on the need to balance military necessity and humanitarian concerns.¹⁶² In line with the principle, an attacker must make a determination of what constitutes a military advantage based on evaluation of the target during a particular set of circumstances and information reasonably available to him or her at the time.¹⁶³ Under IHL, the principle of proportionality prohibits immoderate attacks which result in damage to civilian objects and do not provide a legitimate military advantage.¹⁶⁴ As a result, the attacker must balance the anticipated military advantage and expected civilian damage.

Apart from the proportionality being considered part of customary international law,¹⁶⁵ It is also codified in article 51(5)(b) of Additional Protocol I to the Geneva Conventions. Article 51(5)(b) provides that an attack which causes injury or death to civilians and damage to civilian objects, which is “excessive in relation to the concrete and direct military advantage” gained is considered to be indiscriminate.¹⁶⁶ As a result, indiscriminate attacks are prohibited.¹⁶⁷

The principle of proportionality does not play a bigger role in determining the things that may be attacked but rather how those things may be attacked.¹⁶⁸ The principle does not limit the type or amount of force to be used.¹⁶⁹ It focuses on the

¹⁶¹ Article 35 AP I.

¹⁶² Chris Jenks ‘Law From Above: Unmanned Aerial Systems, Use of Force and the Law of Armed Conflict’ (2010) 85 North Dakota Law Review 649 at 666.

¹⁶³ Ibid at 667.

¹⁶⁴ Article 51(5)(b) AP I.

¹⁶⁵ Jean-Marie *Customary IHL volume I* at 46. Jean-Marie Henckaerts and Louise Doswald-Beck *Customary International Humanitarian Law Volume I: Rules* (2007) at 37. In the *Nuclear Weapons case*, the ICJ stated that “the prohibition of weapons that are incapable of distinguishing between civilian and military targets” is a principle of customary law that cannot be transgressed.

¹⁶⁶ Article 51(5)(b) AP I.

¹⁶⁷ Article 51 (4) of the Protocols Additional to the Geneva Conventions provides that indiscriminate attacks are prohibited. 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.

¹⁶⁸ Thompson Chengeta thesis at 55.

¹⁶⁹ Chris Jenks ‘Law From Above’ at 667.

effects or the expected results of the attack.¹⁷⁰ As such, weapons which cannot be directed at a legitimate target and/or have uncontrollable effects cannot be lawfully employed in an attack during armed conflict.¹⁷¹ Thus, a drone strike must not be indiscriminate and it must be directed at a specific target and the effects must be controllable in order to minimise the amount of civilian damage that may be incidental to the attack.

3. Applying the principle of proportionality to drones

As highlighted by Vivek Sehrawat,¹⁷²

“Proportionality brings with it an obligation to consider all options when making targeting decisions: verification of the target; timing of the attack; the chosen weapon of choice; and warnings and evacuations for civilian populations. Drones, with their ability to see, think, and act in a controlled manner, provide ample opportunity to consider all options before engaging a target. Drone operators, after duly considering all options and taking all mitigating manoeuvres into account, are able to minimise damage to civilian life and property.”¹⁷³

Thus, if used correctly, drones are in fact advantageous in ensuring conformity with the principle of proportionality.

In carrying out drone strikes, the operator must always have due regard to the principle of proportionality.¹⁷⁴ As previously highlighted, drones are not in themselves an indiscriminate means of warfare.¹⁷⁵ Drones use precision guided equipment such as laser-guided missiles which can ensure that they are directed at a specific military

¹⁷⁰ Ibid.

¹⁷¹ Michael N Schmitt Drone Attacks under Jus Ad Bellum and Jus in Bello: Clearing the ‘Fog of Law’ available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1801179&rec=1&srcabs=1759562&alg=1&pos=7 (accessed 21 June 2023) at 9.

¹⁷² Op cit note 79 at 179.

¹⁷³ Ibid.

¹⁷⁴ Yunus Emre Gul ‘Drone Attacks and the Principle of Proportionality in the Law of Armed Conflict’ *Annales de la Faculté de Droit d’Istanbul*, (2021) 70 at 10.

¹⁷⁵ Schmitt ‘Clearing the Fog of Law’ at 9.

objective.¹⁷⁶ Nonetheless, the indiscriminate use of the discriminate weapon remains unlawful.¹⁷⁷ Thus, despite the fact that drones are not in themselves indiscriminate, if they are used indiscriminately, then it would be unlawful and may not meet the standard of proportionality.¹⁷⁸ For instance, if a drone is used to blindly carry out an attack and disregard the presence of civilians in a particular area, it may constitute an indiscriminate attack despite the means used and would likely not meet the proportionality standard if there are too many civilian casualties. As such, using a drone to drop hellfire missiles in an area that has a large number of civilians may be detrimental to passing the proportionality test as the attack may amount to an indiscriminate attack if there are several civilian casualties.¹⁷⁹

4. Care and precaution

Furthermore, article 57 of Additional Protocol 1 also requires that those planning and participating in a military action take constant care in order to prevent loss of civilian life.¹⁸⁰ It must be noted that IHL does not prohibit collateral damage to civilians.¹⁸¹ The nature of war means incidental loss of civilian life is unavoidable. Therefore, in line with the proportionality principle, collateral damage to civilians is only prohibited when it is excessive in relation to the military advantage. Notably, Article 8(2)(b)(iv) of the Statute of the International Criminal Court classifies “...intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or

¹⁷⁶ In terms of article 1(3) of Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), “Military objective means, so far as objects are concerned, any object which by its nature, location, purpose or use makes an effective contribution to military action and whose total or partial destruction, capture or neutralisation, in the circumstances ruling at the time, offers a definite military advantage.” available at https://www.icrc.org/eng/assets/files/other/icrc_002_0811.pdf (accessed 26 November 2017). The Article 1(4) of the Protocol further states that “Civilian objects are all objects which are not military objectives as defined in article 1(3).

¹⁷⁷ As provided in article 2(3) of Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III), “It is further prohibited to make any military objective located within a concentration of civilians the object of attack by means of incendiary weapons other than air-delivered incendiary weapons, except when such military objective is clearly separated from the concentration of civilians and all feasible precautions are taken with a view to limiting the incendiary effects to the military objective and to avoiding, and in any event to minimising, incidental loss of civilian life, injury to civilians and damage to civilian objects.” available at https://www.icrc.org/eng/assets/files/other/icrc_002_0811.pdf.

¹⁷⁸ Schmitt ‘Clearing the Fog of Law’ at 9.

¹⁷⁹ Chengeta thesis at 55.

¹⁸⁰ Article 57 of the Protocols Additional to the Geneva Conventions.

¹⁸¹ Op cit note 79 at 178.

damage to civilian objects... which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated” as a war crime.¹⁸²

Thus, reckless attacks that result in damage to civilians or knowingly launching attacks that would result in civilian casualties which clearly exceeds what is necessary for achieving the military advantage could result in a violation of the principle of proportionality and also constitute war crimes. Hence, care and precaution must be taken in executing an attack. Care and precaution in relation to drones would entail making sure all the necessary checks pertaining to whether the or not the intended target is legitimate and ensuring that should it be considered that the target is legitimate, the effects of such an attack would not excessively affect civilians. Again, if used correctly drones are equipped with the necessary tools which enable care and precaution to be taken before carrying out an attack. Their ability to hover around for long periods is useful in ensuring that the attack is conducted at the right time when the effects of the attack would not excessively affect civilians.

5. Accuracy of drones

While it is important to take care and precaution when conducting an attack, it is equally important that the attack in itself is accurate and hits the intended target. Therefore, in determining the ability of drones to comply with the proportionality standard, an analysis of whether or not the attack in itself is precise enough to minimise harm to civilians is pertinent. One of the aspects of drone technology that is important in this assessment is its accuracy in carrying out attacks. The question that arises in that respect is how much damage a drone strike can cause in and around the area in which a target is located when used to fire missiles. This is essential in determining whether drones cause disproportionate harm. Due to their ability to hover around a particular target for long periods of time and their ability to perform strikes with ‘pinpoint accuracy’, drones have been seen as a better alternative to other traditional methods of conducting military attacks.¹⁸³

¹⁸² Article 8(2)(b)(iv) of the Rome Statute of the International Criminal Court.

¹⁸³ Vogel 123.

It has been argued that due to the exactness that drones offer in conducting attacks, they result in fewer casualties than other traditional methods of warfare and therefore they are more likely to meet the requirements of proportionality.¹⁸⁴ Although this is widely contentious, the assertion that drones are better equipped to cause less harm to civilians than other traditional methods of warfare such as ground forces or manned aircraft if they are used correctly is acceptable. This is particularly because of their ability to observe a particular target for long periods of time and determine the right time to strike with as much accuracy as possible and with less adverse effects to civilians. Moreover, drones are equipped with missiles which are highly accurate which have the capacity to target individuals or even sections of specific structure such as rooms in a building.¹⁸⁵ The missiles are guided by sensors on the drone and can be aided by intelligence from the ground as to the exact location of the intended target.¹⁸⁶ If operated with enough care and caution, drones prevent loss of civilian lives far more than traditional methods of warfare. The operator might, however, make mistakes in making the right decision on when to strike but it remains that the drone provides the operator the opportunity to make the right decision at the right time in order to spare civilian lives.

Critics of drones have pointed out the fact that drone strikes tend to result in a considerable amount of civilian casualties.¹⁸⁷ This is certainly true in some instances. There are several reported cases where drones have been used in which there were a significant number of civilian casualties. For instance, Andrew Exum and David Kilcullen produced a report which indicated that the notion that drones are precise is overstated and that drone attacks resulted in unlimited civilian casualties.¹⁸⁸ Their report highlighted that on average US drone attacks were causing approximately 50 unintended deaths for each intended target in drone attacks carried out in a period of 3 years.¹⁸⁹ These alarming statistics cast serious doubt as to whether drones are precise enough to be

¹⁸⁴ Ibid.

¹⁸⁵ Op cit note 79 at 173.

¹⁸⁶ Ibid.

¹⁸⁷ Fredric Megret 'The Humanitarian Problem with Drones' (2013) *Utah Law Review* 1283 at 1295.

¹⁸⁸ D Kilcullen and A McDonald Exum "Death from Above Outrage Down Below" *New York Times*, 16 May 2009 <http://www.nytimes.com/2009/05/17/opinion/17exum.html> accessed on 26 November 2017.

¹⁸⁹ Ibid.

able to minimise civilian damage in any given situation so as to conform to the principle of proportionality. However, it may be argued that the large number of civilian casualties may be because of miscalculations on the part of the drone operators in terms of timing of an attack rather than the drone capability itself. It should be acknowledged, however, that indeed drone strikes often result in a large number of civilian casualties.

Keeping in mind that drone strikes may result in civilian casualties, the next important question in determining proportionality is whether an attack can be considered proportionate when the civilian damage is weighed against the legitimate military advantage that is gained by such a strike. In that regard certain factors such as the value of the target and the expected damage from the attack must be considered.

6. Value of the target

Weighing the value of the target in terms of the military advantage it gives to the enemy against the number of civilian casualties that may result from the attack is another important consideration in the proportionality assessment. The proportionality assessment is completed by determining whether the target is of significant value and gives a real military advantage and if the attack is executed with due regard for civilians and with caution.¹⁹⁰ In line with this criterion, it is suggested that a high number of civilian casualties would not necessarily mean that the attack does not meet the proportionality criterion.¹⁹¹ If, for example, a military target is pivotal to the enemy operations to such an extent that if eliminated it would likely lead to the cessation of hostilities then it may meet the proportionality standard even though there might be a risk of civilian casualties.¹⁹² On the other hand, attacking a low level target in a public area in which civilian casualties are guaranteed may not meet the proportionality standard because the military advantage gained may be largely insignificant.¹⁹³ Emphasis should be placed on the military advantage gained in relation to the amount of civilian damage and whether or not caution was taken to minimise the damage to civilians. If the test is completed and damage to civilians is not excessive then the attack

¹⁹⁰ Vogel at 127.

¹⁹¹ Ibid.

¹⁹² Ibid.

¹⁹³ Ibid.

would pass the proportionality test. It must be acknowledged, however, that it is difficult to place a quantitative or qualitative value on a target and on civilians in determining whether the target was in fact worth 'sacrificing' the lives of the civilians that would be casualties of the attacks. An objective analysis of this must always be carried out on a case-by-case basis taking into account all relevant circumstances surrounding the attack.

As highlighted before, the number of casualties that may result in a particular attack is only a part of the analysis on proportionality. Due to the fact that there are civilians in most cases of armed conflict in which drones are used, there will almost always be civilian damage.¹⁹⁴ It is the amount of civilian damage in relation to the military advantage obtained that should complete the proportionality assessment. As a result, even if the argument that drones cause a significant amount of civilian damage were to stand, it would still be possible in certain instances for the attack to meet the proportionality standard if the attack provided a significant military advantage to the attacker.

7. Line of sight

Part of the controversy surrounding drones stems from the fact that drones may be remotely controlled from a long distance with no direct human eyes on the target.¹⁹⁵ Purportedly, this results in mistakes being made and causing unnecessary civilian damage. However, this argument has been seen to be counterfactual because drone attacks are often based on high resolution imagery that is transmitted to the operator which then helps in determining whether or not to engage the target.¹⁹⁶ The cameras on drones have incredible capabilities which enable them to provide high resolution images to the attacker. For instance, some drone cameras can be used to zoom in small objects such as a milk carton from as high as sixty thousand feet.¹⁹⁷ The high resolution

¹⁹⁴ Ibid.

¹⁹⁵ Michael N Schmitt Drone Attacks under Jus Ad Bellum and Jus in Bello: Clearing the 'Fog of Law' available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1801179&rec=1&srcabs=1759562&alg=1&pos=7 (accessed 28 November 2017) at 8.

¹⁹⁶ Ibid.

¹⁹⁷ Op cit note 79 at 173.

imagery enables the operator to verify the identity of the target clearly before carrying out an attack. However, as pointed out in the earlier sections of this dissertation, factors such as time delay in transmitting images to the drone operator or a sudden change in whether conditions could affect line of sight and if misjudgement occurs due to these factors, it may result in the deaths of a large number of civilians. In such instances drone attacks may fail to comply with the principle of proportionality.

Moreover, it has been argued that the ability to carefully monitor the target for long periods of time before engaging enables the remote operator to make sound decisions on whether or not to attack.¹⁹⁸ Drone surveillance can be used to carry out what is known as a “pattern of life” analysis in which the activities of civilians are monitored in order to assess and establish the best time and place in which an attack may be carried out in order to avoid causing damage to civilians.¹⁹⁹ If the necessary care and caution is taken, the drone should only be used to attack when it has been established that the target is at a significant distance from civilians.²⁰⁰ Thus, drones reduce the risk of misidentifying a target and causing unnecessary civilian damage.

8. The drawbacks

It should be acknowledged that drones are not perfect. While they are equipped with the capabilities that should enable operators to make informed proportionality assessments before carrying out attacks, mistakes do happen.²⁰¹ There are instances where misidentification occurs and civilians are wrongly identified as targets.²⁰² It is also true that civilians have been incidentally killed during drone strikes in some instances. However, as previously stated, incidental losses of civilian life do not necessarily render the attacks contrary to the proportionality principle and unlawful. Mistakes are an inevitable consequence in the battlefield and civilians are often casualties. The very existence of the principle of proportionality is an acknowledgement of this fact. Emphasis should be placed on whether the necessary steps in order to prevent

¹⁹⁸ Schmitt ‘Clearing the Fog of Law’ at 8.

¹⁹⁹ Ibid.

²⁰⁰ Ibid.

²⁰¹ Ibid.

²⁰² Ibid.

excessive damage to civilians were taken before carrying out an attack which the attacker anticipated would give them a significant military advantage. Thus, it is up to the attacker to take reasonable care in conducting an attack and ensuring that collateral damage to civilians is avoided to the greatest extent possible. The legality of an attack depends on whether such an attack can be considered excessive in relation to the military benefits that the attacker attains from the attack. However, drones seem to offer capabilities that make it improbable for mistakes to occur. If used correctly, drones make it less likely for mistakes to occur.

Further, it must be considered that the attacker does not have the benefit of hindsight before carrying out an attack.²⁰³ The attacker makes a decision based on the circumstances that exist at the time before the attack is carried out.²⁰⁴ Further, the weapon used is irrelevant to the proportionality assessment. It remains that the damage to civilians in relation to the military advantage anticipated forms the basis of that evaluation. Thus, a drone strike will only fail the proportionality test because of the consequences of the attack and not because a drone was used to conduct the attack.²⁰⁵

The choice of weapon used is, on the other hand, relevant in assessment of whether the attacker took the precaution and care in order to spare civilians. The attacker must ensure that they do everything that is feasible in order to verify that the targets of the attack are not civilians or civilian objects.²⁰⁶ Feasibility in this instance would mean that the attacker takes steps which are practically possible while taking into account the prevailing circumstances at the time to prevent civilian damage.²⁰⁷ In that regard, the availability of a drone to the attacker makes it a feasible way of verifying the target by using its ability to provide enhanced imagery and monitor the potential target for long periods of time.²⁰⁸

²⁰³ Chris Jenks 'Law From Above' at 668.

²⁰⁴ Ibid.

²⁰⁵ Schmitt 'Clearing the Fog of Law' at 10.

²⁰⁶ Ibid at 11.

²⁰⁷ Article 1(5) of Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III) provides that "Feasible precautions are those precautions which are practicable or practically possible taking into account all circumstances ruling at the time, including humanitarian and military considerations."

²⁰⁸ Schmitt 'Clearing the Fog of Law' at 11.

The attack is lawful if the attacker conducts this verification process and on reasonable grounds believes that the target is either a civilian directly participating in hostilities or a member of the armed forces they are fighting against.²⁰⁹ Furthermore, the ability of drones to loiter around a target for long periods should be looked at from the perspective of the actual attack itself and not only surveillance. This is because it gives a longer window of opportunity to carry out the attack with precision and avoid civilian casualties.²¹⁰ It is submitted that in certain instances, the use of drones might be required as a matter of law if it is a feasible way of verifying the target available to the attacker.²¹¹ This is because it enables the attacker to take the necessary precautions to prevent unnecessary harm to civilians. The fact that it gives a long window of opportunity to strike means that the possibility of causing unnecessary collateral damage is reduced.

9. Conclusion

Essentially, the principle of proportionality prohibits disproportionate attacks and therefore if an attack that is carried out by a drone is disproportionate it would be considered contrary to the principle. The analysis in this chapter has highlighted the factors that should be taken into consideration in relation to the application of the principle of proportionality to drones under IHL. The chapter highlighted that the firing of hellfire missiles by drone against belligerents does not in itself constitute a violation of the principle of proportionality. It is only if the resultant effect of the attack is excessive in relation to civilian damage that the attack may be considered to be in violation of the principle.²¹²

From the discussion one can draw several guidelines which must be followed for drone strikes in armed conflict to comply with the principle of proportionality. Firstly, the use of drones in carrying out attacks in an armed conflict situation must only be in order to obtain a military advantage.²¹³ Secondly, the drone strike must only be directed at

²⁰⁹ Ibid.

²¹⁰ Ibid.

²¹¹ Ibid.

²¹² Vogel at 127.

²¹³ Ibid at 138.

lawful targets.²¹⁴ Lawful targets would include enemy combatants, civilians directly participating in hostilities and other military objectives. Thirdly, drone strikes may not be authorised if it is reasonably believed that the collateral effects on civilians would be excessive.²¹⁵ The attacker must assess the anticipated military advantage in relation to the collateral damage that may be caused to civilians. Further, the drone operators must always exercise care and precaution in order to prevent unnecessary harm to civilians. Lastly, the drone strike must in fact be conducted within an armed conflict where the principle of proportionality is applicable. This chapter has shown that drones have been developed in a way that allows their use to comply with the principle of proportionality. If the guidelines highlighted above are followed, and if drones are used correctly, then they would comply with the principle of proportionality as provided for under IHL.

VI. CHAPTER 6: LIABILITY

1. Introduction

As outlined at the beginning of this dissertation, the role of IHL is to protect civilians during armed conflict and prevent acts which would cause suffering to those affected by the effects of armed conflict.²¹⁶ However, prevention alone is not enough.²¹⁷ If violations occur, there must be legal consequences in place to deal with the transgressors.²¹⁸ If the rules are to have any meaning or power, a robust system of accountability is of paramount importance and must be put in place in order to enforce those rules.²¹⁹

The previous chapters have highlighted that in certain instances the use of armed drones in carrying out attacks during armed conflict could possibly violate principles of IHL. As a result, the question arises as to whether there are mechanisms in place to deal with alleged violations of IHL and whether they are sufficient considering the evolving nature of the use of drones. This chapter investigates if there are

²¹⁴ Ibid.

²¹⁵ Ibid.

²¹⁶ Tim McFarland *Autonomous Weapon Systems and The Law of Armed Conflict Compatibility With International Humanitarian Law* 2021 at 127.

²¹⁷ Ibid.

²¹⁸ Ibid.

²¹⁹ Ibid.

mechanisms in place to deal with violations in drone warfare. The discussion will outline how the development of drones challenges the efficacy of the existing accountability mechanisms in IHL and explores the possibility of developing new measures in order to align with emerging developments in drone warfare.

As pointed out earlier in this dissertation, the way in which drone strikes are conducted has been shrouded in secrecy. This has made it difficult to hold anyone accountable in cases where violations have been alleged. In order to determine who should be held accountable in cases of alleged violations, it must be ascertained how the drone attack was conducted from beginning to the end. Accountability cannot be achieved if there is no transparency. This requires cooperation and transparency from states. The next section in this chapter discusses the issue of transparency in detail.

2. Transparency

The issue of transparency in drone warfare is a significant one.²²⁰ As highlighted by the former Special Rapporteur on Extrajudicial, summary or arbitrary executions,

“...without disclosure of the legal rationale as well as the bases for the selection of specific targets (consistent with genuine security needs), States are operating in an accountability vacuum. It is not possible for the international community to verify the legality of a killing, to confirm the authenticity or otherwise of intelligence relied upon, or to ensure that unlawful targeted killings do not result in impunity.”

It has been argued that one of the greatest obstacles in determining the extent to which drone strikes comply with the rules of IHL is the lack of transparency.²²¹ It is therefore important to define transparency and determine its requirements under IHL. Defining transparency and its parameters in terms of IHL and drone strikes is a complex

²²⁰Global security at stake: Transparency and Accountability are crucial in Drone Warfare, Available at <https://www.ohchr.org/en/stories/2013/11/global-security-stake-transparency-and-accountability-are-crucial-in-drone-warfare>, accessed on 20 November 2023.

²²¹Usman Javed Drone Strikes: The Issue With Lack Of Transparency available at <https://natoassociation.ca/drone-strikes-the-issue-with-lack-of-transparency/> accessed on 26 December 2023.

issue. This is due to the fact that states are expected to adhere to principles such as military necessity, humanity, precaution, distinction, and proportionality prior to initiating a drone attack, yet IHL does not explicitly demand that states be transparent about the measures taken to comply with these principles.²²² Transparency is often defined in terms of openness and allowing for scrutiny into one's actions. The extent in which transparency is required depends on the context in which the transparency is sought and the consequences which arise from this openness.²²³ In the context of drone operations, transparency would be characterised by access to information relating to how operations are conducted.

Furthermore, transparency is a prerequisite for upholding the rule of law and ensuring that states adhere to their obligations under IHL.²²⁴ It serves as a deterrent to harm, enables oversight, and is necessary for ensuring meaningful accountability for abuse. Without transparency, informed public debate and democratic accountability cannot be achieved.²²⁵

The importance of transparency arises from the need to show : (1) How civilians were affected by a particular strike; (2) If there were errors committed in carrying out the strike and how they can be avoided in future ;(3) whether an effective investigation was carried out after the attack and appropriate remedies were granted for the families of those affected.²²⁶

Common Article 1 of the Geneva Conventions serves as a potential starting point in addressing the issue of transparency under IHL. It requires the High Contracting Parties to the conventions to respect and ensure respect for the conventions' rules in all circumstances.²²⁷ This "ensure respect" duty has been broadly interpreted as a mandate

²²²Op cit note 56 at 82.

²²³ Vaishali Sharma Transparency and Drone Operations Exploring Transparency Requirements in International Humanitarian Law at 1.

²²⁴ The Legality of Armed Drones Under International Law Background Paper By The International Bar Association's Human Rights Institute 2017 available at https://www.ibanet.org/Human_Rights_Institute/council-resolutions ,accessed on 12 December 2023 at 43.

²²⁵ Op cit note 33 at 817-18.

²²⁶ Op cit note 221.

²²⁷ Art 1 of the Geneva Conventions of 1949.

for states to do everything possible to compel offending states to adhere to the conventions.²²⁸ This suggests that states have a responsibility to reveal the steps they have taken to guarantee compliance with and respect for the conventions' rules.²²⁹ As a result, it can be deduced that this obligation implies a certain level of transparency to ensure that these obligations are adhered to.²³⁰ If there is a lack of transparency, civilian losses cannot be accurately assessed and this would in turn be detrimental to procedures relating to victim identification and compensation of non-combatant injury or death.

Transparency regarding the use of lethal force against another state such as in a drone strike is crucial for several reasons. It is a fundamental principle of the Rule of Law that states must exercise transparency at an international level to promote and uphold the international legal order and to ensure state sovereignty. As stated in The House of Lords' Joint Committee on Human Rights report on the UK's targeted killing policies:

"If the availability of drone technology is not to lead to a significant lowering of the level of protection for the right to life, it is important to ensure that there is absolute clarity about the legal frameworks that apply to the use of drones for targeted killing, and that all those involved understand exactly what those legal frameworks require of them."²³¹

This underscores the importance of transparency in the use of lethal force and the need for clear legal frameworks to ensure the protection of human rights.

Transparency in the application of lethal force can potentially deter harm as the prospect of public exposure of wrongdoings could encourage those acting on behalf of

²²⁸ Jeanique Andrea Pretorius *Armed Drones: Transparency And Accountability Under International Law* (LLM Dissertation, University of Pretoria, 2014) at 29.

²²⁹ *Ibid.*

²³⁰ *Ibid.*

²³¹ The House of Lords Joint Committee on Human Rights *The Government's policy on the use of drones for targeted killing* available at <https://publications.parliament.uk/pa/jt201516/jtselect/jtrights/574/574.pdf> (accessed on 17 December 2023) at 21.

the state to adhere more closely to the law.²³² Moreover, transparency enables oversight and is necessary for meaningful accountability when violations occur. It also facilitates informed public debate and allows for democratic accountability.²³³

Given the absence of an explicit transparency requirement in IHL, it is beneficial to consider both IHRL and IL. These bodies of law provide a more defined concept of transparency, which could help determine what might be expected from the notion of transparency under IHL.²³⁴ Transparency in IHRL is rooted in the obligation to investigate human rights violations and to subsequently provide effective relief to the victims of the violations.²³⁵ Therefore, those responsible for violations must be held accountable. Moreover, the right to information can be identified as a factor supporting the need for transparency.

a. The right to truth

Finally, the developing concept of the “right to truth” is inherently linked to transparency. It asserts the right of family members, close relatives, and the community as a whole to be informed about serious human rights infringements.²³⁶ Similarly, it can be argued that the fate of participants to an armed conflict or civilian casualties must be disclosed to the families.²³⁷ The right to truth is understood to be the right of the victims of atrocities and their families to know what transpired in cases where grave breaches occur. Aspects of the concept of the right to truth can be found in article 32 of the First Additional Protocol to the Geneva Conventions which provides for the right of families to know the fate of their relatives. From there onwards, various case law has developed the concept and strengthened its status as law. For instance, in the case of *Velásquez Rodríguez v Honduras*, the court found that even in cases where it was not possible to prosecute, the state still had the obligation to conduct an investigation as to what

²³² Moorehead et al Out of The Shadows: Recommendations to Advance Transparency in The Use of Lethal Force available at https://scholarship.law.columbia.edu/human_rights_institute/25/ accessed on 17 December 2023 at 106.

²³³ Ibid.

²³⁴ Op cit note 56 at 83.

²³⁵ Ibid.

²³⁶ Human Rights Council Resolution 9/11, Right to the truth, preamble para 1; General Assembly Resolution 61/177, art 24 (2); UN Commission on Human Rights, Resolution 2005/66.

²³⁷ Art 32 AP I; art 33 of Additional Protocol I of 1977; ICRC, 'Commentary to the Additional Protocols of 1977' (ICRC 1987) 350, para 1222; art 138 of the Fourth Geneva Convention of 1949.

happened and provide answers to families of those who had disappeared. Thus, the right to know the truth still exists regardless of whether or not criminal proceedings are to be instituted or if there is an aim to hold someone accountable for atrocities.²³⁸

However, it should be acknowledged that there may be constraints on providing transparency or conforming to the right to know the truth, particularly due to political constraints or when a state's national security is at stake. Nonetheless, it is submitted that such restrictions must serve a legitimate purpose. Any limitation should be interpreted narrowly and the rule should guide the exception. Thus, when a decision to maintain secrecy is made, the subsequent impact of the decision on other rights and obligations, as well as its effect on the effectiveness of an investigation and the victims' rights to remedies, must also be taken into consideration.²³⁹ Therefore, a balance must be struck between maintaining national security and upholding the principles of transparency and accountability. This makes it important to carefully consider and rigorously scrutinise decisions related to transparency, particularly in sensitive areas such as drone warfare.

The need for transparency in drone strikes has been highlighted by various calls from numerous stakeholders in International Law for greater transparency during drone strikes. For instance, in a report to the UN Human Rights Council in 2010, Phillip Alston talked about the requirements of both transparency and accountability.²⁴⁰ In that report, he criticised states' failure to disclose their legal rationale for performing targeted killings, the consequences of these targeted strikes in terms of subsequent harm caused to civilians, and the legal safeguards in place.

It has been further argued that a lack of both transparency and accountability in relation to the use of armed drones during armed conflicts breaches the rule of law and has the potential to threaten international security.²⁴¹ As a result some scholars have

²³⁸ Marloes van Noorlos 'A Critical Reflection on the Right to the Truth about Gross Human Rights Violations' (2021) 21 *Human Rights Law Review* 874–898 at 878.

²³⁹ Op cit note 56 at 84.

²⁴⁰ Phillip Alston Report of the Special Rapporteur on extrajudicial, summary and arbitrary executions A/HRC/14/24 available at <https://digitallibrary.un.org/record/685887?ln=en> (accessed on 17 December 2023).

²⁴¹ Op cit note 16 at 4.

advocated for transparency in investigation procedures and that sufficient funds be allocated to ensure that mistakes are recognised.²⁴² This could in turn potentially improve community perceptions of the use of drones during armed conflicts.²⁴³

The concerns about transparency in drone warfare primarily relate to the legal rationale for the drone strike, the identification of targets, and the disclosure of information about civilian casualties and subsequent investigations. In broader terms, providing transparency in drone strike operations necessitates the provision of relevant, timely, accessible, and accurate information about each individual drone attack.²⁴⁴

The US targeted killing program serves as a prominent example in the drone warfare debate concerning the issue of transparency. This program has faced significant international criticism. It is believed that only a small group of policymakers are privy to the process and rules involved in making targeting decisions during drone strikes. As a result, there is a call for greater oversight of the policies used to determine who should be targeted, how and why they are targeted, and putting in place mechanisms to protect civilians during targeting by drones.

While a certain degree of secrecy can be justified to protect and defend national security, especially with the aim of gaining military advantage, it is still desirable for the details of the targeted killing program, like all other drone programs, and the decisions made to employ drones in carrying out strikes abroad to be made more transparent. If not to the general public, then at least to congress in the case of the United States or a similar arm of state in case of other states.²⁴⁵ An international body can also be established and be made privy to such information to ensure that such secrecy is justified in terms of international law.

²⁴² McDonald 'Drones and The European Union: Prospects for a Common Future' available at <https://www.chathamhouse.org/sites/default/files/publications/research/2018-02-05-drones-eu-mcdonald.pdf> accessed on 17 December 2023 at 1.

²⁴³ Ibid.

²⁴⁴ Op cit note 56 at 86.

²⁴⁵ Sarah Holewinski 'Just Trust Us: The Need To Know More about the Civilian Impact of US Drone Strikes' available at <https://www.cambridge.org/core/books/drone-wars/just-trust-us/7E1FF38DFFF002FDFBDA5E98C4371B9B> ,accessed on 17 December 2023 at 61

Furthermore, it has been suggested that transparency must also be extended to several other aspects of the use of drones. This includes components of the targeted killing process, the training in terms of IHL principles given to drone operators, and the application of IHL principles before and during a strike.²⁴⁶

Moreover, it's desirable to gain clarity on how the states identify combatants and civilians, how civilian casualties are assessed and tracked, and how decisions about who will be targeted and why they are made. It's important that this information is transparently available so civilians can understand the behaviours that might make them a target and take steps to protect themselves especially in areas where there is a clear armed conflict taking place. These recommendations could serve as useful considerations and guidelines for all states that use armed drones in combat.

To conclude this section, it is noted that while IHL does not explicitly require transparency from states during an armed conflict, a certain level of transparency is necessary to ensure that states fulfil their IHL obligations. However, there is a noticeable lack of transparency in relation to drone strikes. This deficiency could arguably undermine the motivation to fulfil certain duties, such as accurately determining civilian casualties. This, in turn, could impact the accountability process by weakening the victim identification process necessary for reparations in cases of non-combatant injury or death. It underscores the importance of transparency in upholding the principles of accountability and justice in the context of armed conflicts.

3. Accountability

Central to the concerns that have been raised regarding the use of armed drones is the question of accountability - the question, that is, of which individual or state bears accountability for a drone's activities. Accountability must be looked at in terms of how a particular drone is operated as this may determine who might be held accountable in case of alleged violation.

²⁴⁶ Ibid.

The use of drones in armed conflicts raises significant accountability issues, particularly due to the insufficient information released about drone strikes and the inadequate reporting of casualties resulting from these attacks. As a result, the limited amount of publicly available data on deaths resulting from individual drone attacks, including both collateral deaths and target casualties, has been described as creating an “accountability vacuum”.

Although the focus of this paper is on drone strikes which occur during armed conflict in general, it is worth noting that drone strikes often occur within the context of non-international armed conflicts. This has an effect on accountability and measures that can be implemented in instances where violations have taken place. The IHL rules that apply to these conflicts regarding accountability are considered less comprehensive than those applicable to international armed conflicts. However, customary IHL has extended the rules pertaining to international armed conflicts to also apply to non-international armed conflicts.

Accountability, in this context, involves penal consequences for offences committed and necessitates efforts to prevent their recurrence. Accountability relies not only on transparency, as outlined above, but also on effective oversight mechanisms that test compliance and identify misconduct. It depends on institutions that ensure justice and impose penalties or punishment where necessary.

The requirement of accountability generally includes an obligation to conduct investigations regarding alleged violations, prosecute the responsible parties, and provide victims with reparation for the infringement of their rights. It also entails a duty to prevent further occurrences of violations. Therefore, accountability is a multifaceted concept that goes beyond transparency. It involves a range of measures and mechanisms designed to ensure compliance with the law, deliver justice, and prevent future violations.

Accountability is considered a requirement under International Humanitarian Law IHL. There are extensive rules which obligate participants of armed conflict to record

civilian casualties in an armed conflict.²⁴⁷ Furthermore, there are several provisions that mandate “investigation” in certain circumstances, such as the duty to search for individuals responsible for committing war crimes.²⁴⁸ For example, according to Article 49 of the Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field, the High Contracting Parties are required to agree to enact necessary legislation to establish effective punishments for individuals who commit, or order others to commit, any of the grave breaches envisioned in the convention.²⁴⁹ This underscores the importance of transparency and accountability in the use of drones in armed conflicts, and the need for states to fulfil their obligations under IHL. It also highlights the need for more comprehensive reporting and public disclosure of information related to drone strikes.

In order to put the above obligation into effect, the High Contracting Parties are expected to search for individuals who have allegedly committed a grave breach and bring such individuals before their national courts, or hand them over to another High Contracting Party that has made a prima facie case in this regard. In addition to the grave breaches envisioned by the convention, the High Contracting Parties are also expected to take necessary measures to suppress all conduct that may be considered contrary to the rules of the convention. Similar provisions can be found in the subsequent Geneva Conventions.

Therefore, when there are reasons to suspect that IHL violations have occurred due to a drone strike during an armed conflict, such as when disproportionate harm has occurred or individuals have been incorrectly identified as targets, the principle of accountability under IHL requires a preliminary investigation to be undertaken. The number of civilian deaths must be determined and disclosed.

a. Duty to investigate

²⁴⁷ Jeanique Andrea Pretorius *Armed Drones: Transparency And Accountability Under International Law* (LLM Dissertation, University of Pretoria, 2014) at 30.

²⁴⁸ ‘Rule 158. Prosecution of war crimes’ available at https://ihl-databases.icrc.org/en/customary-ihl/v1/rule158#Fn_103666CB_00001, accessed on 22 December 2023.

²⁴⁹ Art 49 of the Geneva Convention (I) for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field.

Taking into consideration that attacks against participants in armed forces are permissible under IHL, a full-scale investigation into every drone attack is not necessarily required when the targets have been confirmed to be legitimate. This is generally the case unless there are other factors that make the operation questionable, such as a significant degree of incidental civilian harm during the attack. An obligation exists to conduct an investigation and punish those responsible for violations if it is deemed appropriate.²⁵⁰ Therefore, adherence to accountability requires that at the very least a preliminary investigation be carried out when there are alleged grave breaches and civilian casualties must be determined and disclosed.²⁵¹

When strikes are directed at individuals who are merely suspected of being militants or terrorists, such as during targeted strikes, the legality of such an attack could be contentious. Therefore, in situations where civilian status is generally presumed, it is suggested that an investigation should be conducted as a necessary safeguard. Admittedly, the interpretation of this duty to investigate is not entirely clear. This has led to some uncertainty about what such an investigation should entail. To provide some clarity, the UN General Assembly adopted a resolution that reinforces the duty to respect and ensure respect for and implement International Human Rights Law and International Humanitarian Law . It also emphasises the need to investigate violations effectively, promptly, thoroughly, and impartially and, where appropriate, take action against those allegedly responsible in accordance with domestic and international law.

There is ongoing discussion about what this investigation might involve or what its nature should be. For instance, Human Rights Watch has recommended that investigations into war crimes should be thorough, impartial, and prompt, and should involve an independent prosecution process. Some authors suggest that the duty to investigate involves determining whether the strike on the individual was lawful, and further entails an investigation into any resultant incidental injuries, destruction, or casualties arising from the attack.

²⁵⁰ Art 146 of the Fourth Geneva Convention of 1949.

²⁵¹Op cit note 33 at 818.

For an investigation to be considered effective, it is recommended that it must be thorough, impartial, and immediate, and involve a sufficient amount of public scrutiny. These recommendations are crucial in ensuring accountability and justice in the context of drone warfare. A key aspect of accountability is the recording of casualties. While the Geneva Conventions do not explicitly mandate a systematic record of all deaths resulting from the use of lethal force during an armed attack, they do provide for the duty to search for and identify individuals who are either dead or missing during armed conflict situations.

Given that states have a clear obligation to conduct investigations in instances where potentially illegitimate strikes were carried out, it is evident that they would be practically unable to fulfil their duty without maintaining a comprehensive record of both combatant and civilian deaths resulting from a military operation. Therefore, it is argued that due to the existing obligations in IHL regarding missing and dead persons, and the interpretation of these provisions, a binding international duty exists for each party to an armed conflict to record every civilian death during the conflict. This applies regardless of whether it is an international or a national armed conflict.

When thinking about the responsibility of accountability in the context of drone strikes, it's logical to expect that it would involve holding the relevant actors or institutions accountable for their actions. This would be achieved through comprehensive and unbiased investigations, and ensuring there are consequences when obligations aren't fulfilled. Therefore, documenting casualties is crucial. It's worth noting that while transparency often paves the way for accountability, it doesn't always lead to it. The concepts of transparency and accountability are interconnected, but when outlining their prerequisites, they should be examined separately.

b. Reparations

The role of reparations in holding states accountable for the aftermath of drone attacks is crucial. Victims of serious violations of IHL due to drone strikes have a right to reparation, given the customary obligation to provide reparations. The scope of the reparation given to these victims will vary based on the specific circumstances of each case and the severity of the violation. Therefore, accountability in the context of drone

strikes is vital to fulfil the duty of reparation, enabling victims to receive guarantees of non-repetition, compensation, restitution, rehabilitation, and satisfaction. If the duty of accountability is overlooked, it could potentially hinder the victims of unlawful strikes from seeking reparations.

4. Conclusion

From the above, it's clear that IHL does incorporate some mechanisms related to the duty of accountability. However, enforcing this duty presents certain challenges. Notable weaknesses can be seen among states regarding their obligation to extradite or prosecute, as well as their readiness to collaborate during an investigation or prosecutions. Additional weaknesses relate to the trial of individuals charged with such violations and their subsequent punishment if convicted.

In an effort to bolster IHL's stance, the UN has adopted certain mechanisms over the years to somewhat counter these weaknesses. Nonetheless, enforcing IHL continues to be a challenge. This, along with issues like the US's reluctance to ratify AP I and AP II, continues to obstruct the enforcement of accountability for IHL violations via drone strikes, particularly in the contentious use of drones in targeted strikes.

5. Recommendations

In light of the deficiencies with transparency and accountability pertaining to drone strikes, the following recommendations can be made:

a. Investigate

As highlighted above, the duty to investigate is not always adhered to. It is put forward that this duty is a fundamental aspect in ensuring compliance with IHL when drone strikes are conducted and therefore investigations must take place in each instance where there is suspicion or allegations of non-compliance with the rules of IHL. A review of civilian casualties of war must take place and the review must contain information on the number of civilian fatalities and injuries including the sex, age and other relevant demographic information of such victims. Including such information in the review can paint a picture as to whether the drone strike was carried out in a manner which sought

to comply with the rules of IHL or if it was a blatant breach of the rules. For instance, if the strike was carried out and the result was that the majority of the fatalities were children below the age of ten, it would possibly indicate a blatant disregard of the rules of targeted as children would not have been possibly participating in the hostilities.

In addition to this, the impact which a drone strike had on civilian infrastructure and displacement of civilians must also be included in the investigation so as to determine if there is a need for reparations in order to ensure meaningful consequences for those found to have blatantly disregarded IHL rules. Lastly, the outcome of investigations must be made public. Certain outcomes which may touch on the national security of a state may not be made public. However, at the very least, the demographic information of the casualties and the extent of the damage to civilian infrastructure should be made public.

b. Review of targeting practices.

In the preceding chapters, the targeting practices that are employed when conducting drone strikes have been outlined. The adequacy of some of the practices in ensuring compliance with IHL have been questioned. Therefore, some of the practices must be reviewed. It must be made clear how states come to the conclusion that something or someone is considered a legitimate target. This is particularly important in NIAC where non-state actors do not always identify themselves as direct participants in armed conflict and often blend with civilians to avoid detection. For instance, a state should be able to clarify how it came to the conclusion that an individual dressed in normal civilian attire and walking into an abandoned school where civilians often wonder about was deemed to be a legitimate target to warrant a drone attack. Thus, the classification of certain casualties as combatants in areas where it is not entirely clear that they were directly participating in hostilities must be reviewed. Suspicion of directly participating in hostilities should not be deemed enough to warrant a lethal drone strike.

c. Pilot training and continuous assessment.

Part of the criticisms of the drones is that they create a 'playstation' mentality in which the pilots are detached from the reality of the consequences of a drone strike. Drone

pilots are in a unique position where they are not in direct line of fire as well as being away from the battlefield. This creates a sense of security and detachment. There may be less hesitancy on the part of a drone pilot in conducting a strike when it would not be normally the case if they were directly involved on the battlefield. Continuously doing so can result in the drone pilot being less cautious and it may result in overlooking IHL rules as it would be 'easy' to do so. Perhaps some operators might find it 'enjoyable' due to this video game mentality. It is suggested that the mental state of drone operators must be continuously tested. Psychological assessments and support must be provided where necessary.

d. Creation of a convention controlling the use of specific drones?

Earlier in this paper, it was pointed out that there is a general acceptance of human operated drones. Although there are areas of concern in terms of how they are operated, if they are used correctly, they largely comply with the existing rules of IHL. However, the emergence of autonomous systems presents a different dimension to the use of drones and their legality is contentious. As pointed out by UN Secretary-General António Guterres, "autonomous weapon systems – generally understood as weapon systems that select targets and apply force without human intervention – pose serious humanitarian, legal, ethical and security concerns."²⁵² It is therefore paramount that states develop new binding instruments which prohibit or at the very least govern the use of fully autonomous drones in certain aspects of war. Without a specific treaty governing the use of autonomous weapons, states will have different conflicting views about how the general rules apply.²⁵³

Clear restrictions must be put in place in terms of when and where such drones can be used, the type of targets they are allowed to strike and the amount of force that can be used. Furthermore, the restrictions must facilitate human intervention in an effective manner so that missions may be timeously aborted where necessary.²⁵⁴ The

²⁵² UN and Red Cross call for restrictions on autonomous weapon systems to protect humanity available at <https://news.un.org/en/story/2023/10/1141922> accessed on 26 December 2023.

²⁵³ Ibid.

²⁵⁴ Ibid.

responsibility to comply with IHL should ultimately lie with the military commanders and not the drone itself through software or algorithm.

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