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The efficacy and legality of drones in modern warfare

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The efficacy and legality of drones in modern warfare

Abstract

The aim of this paper is to analyse the efficacy and legality of drones in modern warfare. It argues that the use of drones is a specific characteristic of modern warfare strengthening the conclusion that modern warfare cannot be explained sufficiently by the classic understanding of peace and war anymore. It is the asymmetric nature of warfare and armed conflict that makes the use of drones both necessary and dangerous at the same time. In particular, the long-term effects on the population directly affected by drone strikes and the resultant consequences for the relationship between the involved states as well as the possible change in the dynamic of modern armed conflicts evolving from growing knowledge and cheaper technology are reason for concern regarding the to date unregulated use of drones both in- and outside combat. In addition to the socio-political concerns, the paper outlines that, from a legal point of view, the use of drones is not as unproblematic as military and government officials tend to say. Using statistics from the US army and the US CIA, this paper will argue that the technology itself is indeed able to be highly precise and efficient. This, however, does not mean that the application of drones does not leave room for highly disproportionate attacks. It is the humane application of the weapon that makes the difference. Considering both the socio-political effects and the problems arising from the core principles of LOAC, particularly proportionality, this paper will argue that it is necessary to create a legal frame work regulating the use of drones in- and outside combat.

Keywords

Drones, US army, CIA, armed conflicts, weapons, terrorism, international human rights, civilian casualties, jus ad bellum, jus in bello

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THE EFFICACY AND LEGALITY OF DRONES IN MODERN WARFARE

LISE KÄNNER

INTRODUCTION

In November this year, four former sensor operators of the US drone program accused the program of pushing terrorism even further in an open letter addressed to President Obama, Secretary of Defence Carter and CIA Director Brennan:

We came to the realization that the innocent civilians we were killing only fuelled the feelings of hatred that ignited terrorism and groups like ISIS, while also serving as a fundamental recruitment tool similar to Guantanamo Bay. This administration and its predecessors have built a drone program that is one of the most devastating driving forces for terrorism and destabilization around the world.¹

In his speech on Counterterrorism in 2012, Brennan, however, argued that the US drone strikes meet the principle of proportionality in the laws of armed conflicts:

By targeting an individual terrorist or small numbers of terrorists with ordnance that can be adapted to avoid harming others in the immediate vicinity, it is hard to imagine a tool that can better minimize the risk to civilians than remotely piloted aircraft.²

These two statements concisely depict the current debate regarding the use of drones in armed conflicts.³ On the one hand, drones are viewed as the most precise and least harmful weapon currently available. On the other hand, much attention has been given to the concern, that, regarding long-term effects, the use of drones in armed conflicts is not only not solving the fundamental conflict but even creating and escalates the conflict itself. Much tension exists between the goal to

¹ Brendon Bryant et al., *Open Letter* <<https://assets.documentcloud.org/documents/2515596/final-drone-letter.pdf>>.

² John O Brennan, 'Speech on Counterterrorism' (Speech delivered at the Woodrow Wilson International Center for Scholars in Washington, DC, 30 April 2012) <<http://www.cfr.org/counterterrorism/brennans-speech-counterterrorism-april-2012/p28100>>.

³ This paper addresses predator drones, i.e. unmanned aerial and remotely piloted controlled vehicles that are equipped with weapons, e.g. missiles. It does not focus on drones that are used for mere surveillance or intelligence gathering. It also does not examine the use of drones in civil contexts.

use effective weapons in the fight against terrorism, on the one hand, and the long-term aim of sustainably solving highly complex armed conflicts and of compliance with international human rights standards, on the other hand. It is obvious that a legal balance between both must be found. Where this balance lies, however, is highly controversial. It is this sensitive field of tension that opens up the discussion to various questions regarding the actual socio-political effects of drone strikes, numbers and statistics surrounding drone strikes as well as the assessment of existing legal principles and their adequacy in terms of addressing the highly increased use of drones. For this purpose, this paper discusses both the efficacy and legality of the use of drones in modern warfare.

I SOCIO-POLITICAL EFFECTS OF DRONES

The aim of this paper is to analyse not only the legality but also the overall efficacy of drones in modern warfare. This requires having a deeper look into the socio-political effects that drones have. While the short-term effects are more or less predictable, the long-term effects are more complex to foresee. However, for the purpose of this paper, they are the more important ones. Although they mostly have been neglected in the current public debate about the use of drones, the author believes that they are of greatest importance for the outcome of the analysis of the efficacy and legality of drones in modern warfare.⁴

1 Short-Term Effects

For the purpose of this paper, short-term effects describe the direct effects of a specific attack. Thus, short-term effects include the direct outcome of an attack in terms of safety, casualties and destruction as well as direct effects on the daily life of the affected population. It does not, however, include these effects that become visible over a longer period of time.

1.1 *On The Population Affected by Drones*

The effects on a population that is affected by drones are diverse. On the one hand, drone strikes targeting terrorists can improve the safety of the citizens in the targeted area.⁵ However, a study

⁴ See also Shahzad Bashir and Robert D Crews, *Under the Drones – Modern Lives in the Afghanistan-Pakistan Borderlands* (Harvard University Press, 2012) 1-16, 257-62.

⁵ Audrey Kurth Cronin, 'The Strategic Implications of Targeted Drone Strikes for US Global Counterterrorism' in David Cotright, Rachel Fairhurst and Kristen Wall (ed), *Drones and the Future of Armed Conflict, Ethical, Legal and Strategic Implications* (The University of Chicago Press, 2015) 99, 103-4; Patrick B Johnston and Anoop K Sarbahi, *The Impact of US Drone Strikes on Terrorism in Pakistan* (21 April 2015) <<http://patrickjohnston.info/materials/drones.pdf>>; see also David A Jaeger and

found out that the strikes often ‘simply [led] the militants to shift their operations elsewhere’ than ultimately prevent terrorist attacks.⁶ One might think that the targeting of terrorist groups that try to prohibit the population from pursuing their every-day life, like going to school or to work, can improve the living standards of the affected population. In fact, access to education becomes even worse, as a report by the International Human Rights and Conflict Resolution Clinic at Stanford Law School shows.⁷ Furthermore, drone strikes on leading terrorists can cause even more aggression within the particular terrorist group. The higher degree of aggression can then eventually be carried out on the local population. Additionally, drone strikes do cause civilian casualties.⁸ The constant fear of being attacked by a drone strike does not necessarily create an environment in which people feel safe.⁹

1.2 *On Military or Intelligence Goals and Strategy*

The short-term effects of drone strikes for military or intelligence goals and their strategy are clear and obvious. A military or intelligence operation aiming to kill a certain target is fulfilled if this target is actually killed. The success lies within the accomplishment of the operation itself.¹⁰

2 Long-term Effects

While the short-term effects of drone strikes are to a reasonable extent measurable and foreseeable, the long-term effects are more complex. It is their higher degree of complexity, however, that makes the long-term effects even more important.

2.1 *On the Population Affected by Drones*

Zahra Siddique, *Are Drone Strikes Effective in Afghanistan and Pakistan? On the Dynamics of Violence between the United States and the Taliban*, 2011, IZA Discussion Paper No. 6262.

⁶ Patrick B Johnston and Anoop K Sarbahi, *The Impact of US Drone Strikes on Terrorism in Pakistan* (21 April 2015) <<http://patrickjohnston.info/materials/drones.pdf>> 11.

⁷ International Human Rights and Conflict Resolution Clinic at Stanford Law School and Global Justice Clinic at NYU School of Law, *Living Under Drones: Death, Injury, and Trauma to Civilians from US Drone Practices in Pakistan* (2012), <<http://chrjg.org/wp-content/uploads/2012/10/Living-Under-Drones.pdf>> 88-92.

⁸ See ‘C.I. The Use of Drones In and Outside Combat’ of this paper for more details on this.

⁹ International Human Rights and Conflict Resolution Clinic at Stanford Law School and Global Justice Clinic at NYU School of Law, *Living Under Drones: Death, Injury, and Trauma to Civilians from US Drone Practices in Pakistan* (2012), <<http://chrjg.org/wp-content/uploads/2012/10/Living-Under-Drones.pdf>> 80-8.

¹⁰ Audrey Kurth Cronin, ‘The Strategic Implications of Targeted Drone Strikes for US Global Counterterrorism’ in David Cotright, Rachel Fairhurst and Kristen Wall (ed), *Drones and the Future of Armed Conflict, Ethical, Legal and Strategic Implications* (The University of Chicago Press, 2015) 99-120.

The long-term effects on the population that face drone strikes on a regular basis are intense. Drone strikes can cause not only civilian casualties that rip families apart but also massive destruction of infrastructure.¹¹ In addition, in some regions this infrastructure is maintained by terrorist groups who thereby gain local support. Destroying the little infrastructure that is left in remote regions like the border region between Pakistan and Afghanistan while also killing those who were able to maintain and build this infrastructure can cause great harm to a population. This population then faces the situation of ultimate dependence on (foreign) humanitarian support.

2.2 *On the Relationship Between the State Conducting Drone Strikes and the Population Affected by Drones*

Another important aspect is the change in relationship between the state that carries out drone strikes and the affected population. Since a population faces the situation that it is dependent on the support by exactly the same people who are responsible for the destruction in the first place, drone strikes can result in great mental and also physical resistance in the population towards the state conducting drone strikes.¹² Additionally, the fact that there are civilian casualties increases the probability that the affected population will blame the state or organisation that is responsible for the drone strikes rather than the terrorists themselves.¹³ This may even result in providing a valuable recruitment tool for the terrorist groups.¹⁴ Furthermore, in some areas there is actually local support for terrorist groups where a state is not capable anymore to administer the every-day life. Instead, non-state actors like terrorist groups have taken this role as for example the HAMAS that is administering the Gaza Strip. While from an outside perspective it might be desirable to protect a population from the influence of a terrorist group, this is not necessarily the position of the affected population. Consequently, it is likely that the relationship between the population affected by drone strikes and the state conducting the drone strikes worsens over the time.¹⁵ Furthermore,

¹¹ International Human Rights and Conflict Resolution Clinic at Stanford Law School and Global Justice Clinic at NYU School of Law, *Living Under Drones: Death, Injury, and Trauma to Civilians from US Drone Practices in Pakistan* (2012), <<http://chrj.org/wp-content/uploads/2012/10/Living-Under-Drones.pdf>> 77-80.

¹² Audrey Kurth Cronin, 'The Strategic Implications of Targeted Drone Strikes for US Global Counterterrorism' in David Cotright, Rachel Fairhurst and Kristen Wall (ed), *Drones and the Future of Armed Conflict, Ethical, Legal and Strategic Implications* (The University of Chicago Press, 2015) 99, 111-3.

¹³ Ibid.

¹⁴ See Brendon Bryant et al., *Open Letter*, <<https://assets.documentcloud.org/documents/2515596/final-drone-letter.pdf>>; Michael Boyle, 'The costs and consequences of drone warfare' (2013) 89 *International Affairs* 1, 13.

¹⁵ Audrey Kurth Cronin, 'The Strategic Implications of Targeted Drone Strikes for US Global Counterterrorism' in David Cotright, Rachel Fairhurst and Kristen Wall (ed), *Drones and the Future of*

drone strikes are likely to create new or even stronger hostilities between the two states or populations.¹⁶

2.3 *On Military or Intelligence Goals and Strategy*

The effect that drone strikes can have on the relationship between the state conducting drone strikes and the population that is affected by these changes the value of drone strikes for military or intelligence goals and strategy dramatically. While a drone strike might perfectly fulfil its purpose for a short-term goal, it can result in creating more problems than solving in the longer term. The reinforcement of solidarity of the population with terrorist groups as well as growing hostilities against the very own state strongly counteract long-term strategies aimed at reducing the threat of terrorists while securing the local as well as domestic population.¹⁷

2.4 *On the Dynamic of Modern Armed Conflicts*

It is likely that drones will be used by a variety of actors in the future as technology is improving rapidly while becoming cheaper at the same time.¹⁸ This is reason for concern. While at the moment drones are mainly used by a fairly small number of states (lead by the US),¹⁹ there is good reason to believe that in the future drones become available to authoritative and dictatorial regimes as well as terrorist non-state actors.²⁰ In the hands of dictators, drones are a perfect technology to pursue attacks against oppositional parts of the own population or even genocide and terrorist groups could use them for attacks on their enemies.²¹ Furthermore, it is unimaginable what this technology could be used for in the hands of a terrorist organisation like HAMAS that still expressly pursues the

Armed Conflict, Ethical, Legal and Strategic Implications (The University of Chicago Press, 2015) 99, 111-3, showing impressively that even the relationships between the US and their allies worsen because of the drone programs.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ David Hastings Dunn, 'Drones: disembodied aerial warfare and the unarticulated threat' (2013) 89 *International Affairs* 1237, 1239-42.

¹⁹ For a detailed list of countries using drones see Simon Rogers, *Drones by countries: who has all the UAVs?* (4 August 2012) *The Guardian* <<http://www.theguardian.com/news/datablog/2012/aug/03/drone-stocks-by-country>>.

²⁰ Just recently this year, an enormous number of robotics and AI researchers published an open letter expressing their serious concerns about the future development of autonomous weapons in modern warfare: *Autonomous Weapons: An Open Letter from AI & Robotics Researchers* (26 July 2015) *Future Of Life* <<http://futureoflife.org/open-letter-autonomous-eapons/>>.

²¹ David Hastings Dunn, 'Drones: disembodied aerial warfare and the unarticulated threat' (2013) 89 *International Affairs* 1237, 1242-6.

erasure of the whole Jewish people.²² With the increasing use of drones in armed conflicts throughout the world, the dynamics of modern armed conflicts will change dramatically towards an even more asymmetric and cruel form of armed conflict.

II LEGALITY OF DRONES

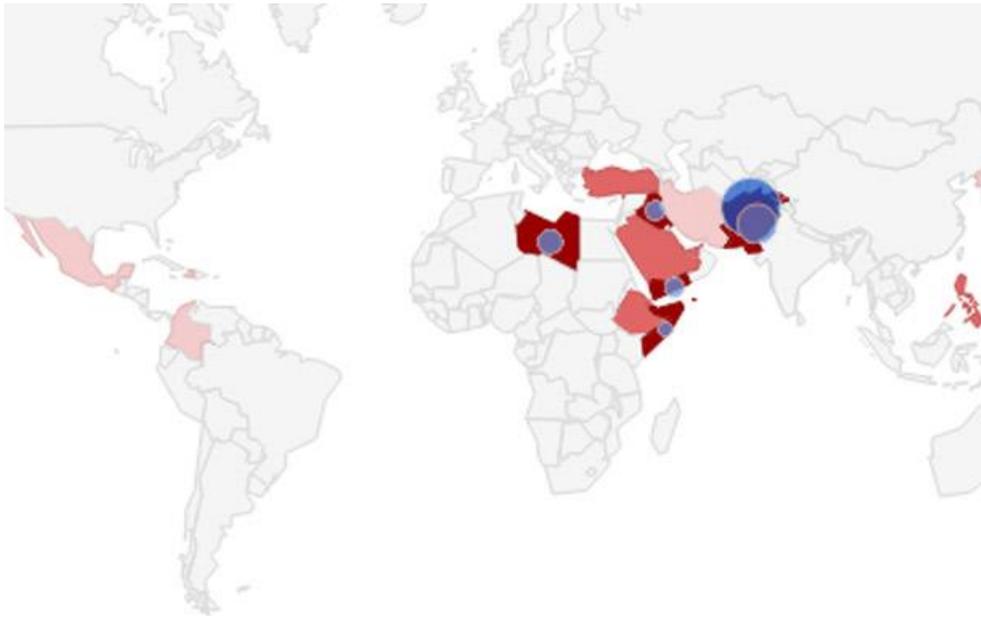
The legality of drones includes a variety of topics concerning legal issues arising from both, *jus ad bellum* and *jus in bello*. However, this paper does not aim to assess the general legality of targeted killings, which mainly focuses on the questions of conflict status and related issues. It will, however, acknowledge that the increasing use of drones regardless of the actual conflict status, as visualised by the US Army drones in Afghanistan and the CIA drones in Pakistan, leads to the necessity of creating a legal frame work for the use of drones both, in- and outside combat.

3 The Use of Drones In and Outside Combat

Drones are used in a variety of contexts. Figure 1 shows the different areas in the world where the US are currently operating drones. It is depicting the areas in which predator drones are used in dark red. The blue dots indicate the intensity of the drone missions in the affected areas. Although the USA are without doubt pioneers in the field of drones, other states including many European states are catching up on this development.²³ Additionally, processes and procedures within the military or intelligence agencies are generally not open to public. This makes it even more difficult to gain access to verified numbers and statistics.

²² See only Article 7 of the Charta of the HAMAS which says: 'The time will not come until Muslims will fight the Jews (and kill them); until the Jews hide behind rocks and trees, which will cry: O Muslim! there is a Jew hiding behind me, come on and kill him!', (5 December 2015) The Jerusalem Fund <<http://www.thejerusalemfund.org/www.thejerusalemfund.org/carryover/documents/charter.html?chocaid=397>>.

²³ New America, *World of Drones* (5 December 2015) International Security <<http://securitydata.newamerica.net/world-drones.html>>; Michael Mayer, 'The new killer drones: understanding the strategic implications of next-generation unmanned combat aerial vehicles' (2015) 91 *International Affairs* 765, 768-73.

Figure 1: US Drone Engagement throughout the World²⁴

That the available numbers and statistics can never be independent and impartial is an ambiguity that this paper is willing to take. Using no numbers would make a legal analysis almost impossible. Therefore, but in full awareness of the problems arising from using a statistical approach, the following chapter will introduce numbers and statistics involving the numbers of US drone strikes in Afghanistan and Pakistan and the caused deaths of civilians and military objectives.

3.1 Case Study 1: US Army Drones in Afghanistan

The US has been using drones in Afghanistan since 2001, which have been used for various purposes including surveillance, general combat air support and targeted killings.²⁵ In 2013, the UN released the Afghanistan Annual Report on Protection of Civilians in Armed Conflict.²⁶ The report stated that in the years 2011 and 2012, of all US military drone strikes less than 1% caused civilian casualties (see Table 1).²⁷ At first sight, these results seem surprising since the public perception of

²⁴ Figure from: Elspeth Reeve, *The Scope of America's World War Drone* (6 February 2013) The Wire <<http://www.thewire.com/politics/2013/02/world-war-drone-map/61873/>>.

²⁵ Megan Braun and Daniel R Brunstetter 'Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim' (2013) 12 *Journal of Military Ethics* 304, 310.

²⁶ UNAMA, *Afghanistan Annual Report 2012 Protection of Civilians in Armed Conflict* (February 2013) UNAMA UN Missions <<http://unama.unmissions.org/LinkClick.aspx?fileticket=K0B5RL2XYcU%3d&tabid=12254&language=en-US>>.

²⁷ Megan Braun and Daniel R Brunstetter 'Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim' (2013) 12 *Journal of Military Ethics* 304, 310-1.

the US drone engagement is contrary to these numbers. However, the US military follows high standards to evaluate whether a drone strike should be conducted or not. The responsible operators have to be convinced that the collateral damage of a strike is below 10 % before the drone strike can be approved.²⁸ This strict policy is an outcome of the US military core strategy in Afghanistan, which is to build up and secure trust with the local population and government.²⁹

Table 1: US military Drone Strikes in 2011 and 2012

Year	Total strikes	Strikes causing civilian casualties	% of strikes causing civilian casualties
2011	294	1	< 1
2012	506	5	< 1
Both	800	6	< 1

3.2 Case Study 2: CIA Drones in Pakistan

The New America Foundation collected data on the CIA drone engagement in Pakistan over a long period of time. According to this data, between 2004 and 2012 the CIA conducted 343 drone strikes in Pakistan (see Table 2).³⁰ Of these, 80 strikes caused civilian casualties.³¹ Thus, 23 % of the drone strikes killed civilians. In comparison to the percentage causing civilian deaths in the US military engagement in Afghanistan, 23 % is remarkably high.

²⁸ Ibid, 310; Chairman, Joint Chiefs of Staff, *No-Strike and the Collateral Damage Estimation Methodology* (13 February 2009) American Civil Liberties Union <https://www.aclu.org/files/dronefoia/dod/drone_dod_3160_01.pdf>; see also Gregory S McNeal, 'Targeted Killing and Accountability' (2014) 102 *The Georgetown Law Journal* 681, 754.

²⁹ Megan Braun and Daniel R Brunstetter 'Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim' (2013) 12 *Journal of Military Ethics* 304, 315-6.

³⁰ Data cited in Megan Braun and Daniel R Brunstetter 'Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim' (2013) 12 *Journal of Military Ethics* 304, 311-4.

³¹ Ibid.

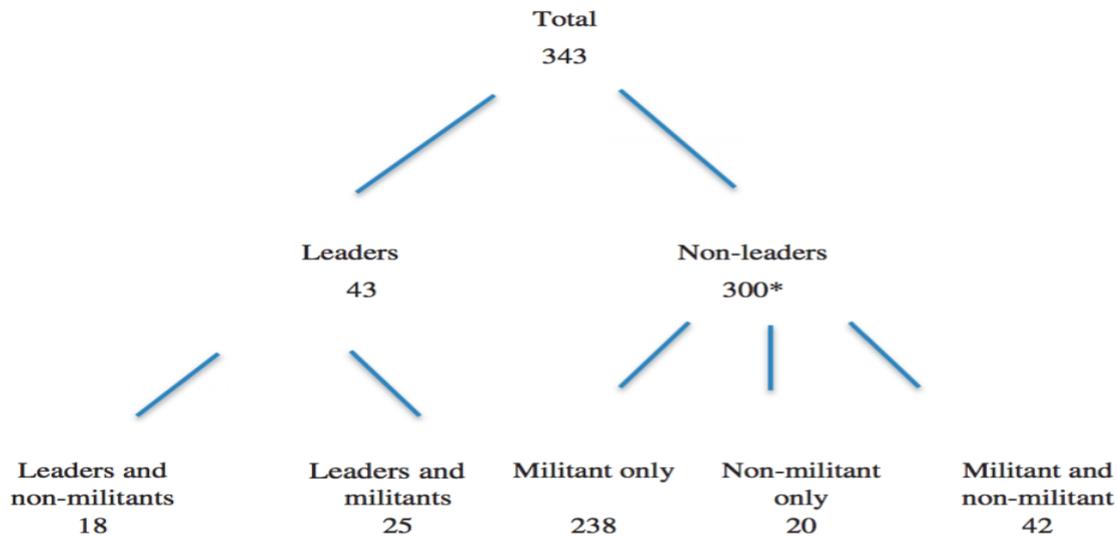
Table 2: CIA drone engagement in Pakistan from 2004-2012³²

Year	Total strikes	Strikes killing non-militants	% of strikes killing non-militants	Number of non-militants	Average number of non-militants killed in strikes with non-militant deaths
2012	48	10	21	28-44	3.6
2011	73	12	16	89-102	8.0
2010	122	20	16	60-102	4.1
2009	54	16	30	110-215	10.2
2008	36	15	41	64-88	5.1
2004-07	10	7	70	111-125	16.9
Total	343	80	23	462-676	7.1

Furthermore, only 43 of the 343 strikes killed leaders (13 % of the total strikes). Of those, however, 18 strikes killed non-militants (42 %). The 300 strikes directed at non-leaders targeted militants but also civilians. Targeting non-leaders can have several reasons. The most compelling, however, is that the strikes are carried out to ‘deny a safe haven’ for terrorism,³³ and constant attacks on the ordinary business of terrorist groups make it harder for those to settle in a certain area. The attacks make it harder for the groups to establish permanent bases from which they could operate well-coordinated and equipped. However, the provided data also shows that 21 % of the strikes that are presumed to be directed at denying a safe haven cause civilian casualties. In addition, 6 % of the 300 strikes caused civilian only casualties. Thus, an extraordinarily high number of drone strikes directed at leaders caused civilian deaths. The number of drone strikes not directed at leaders is lower, but still very high compared to the very small number of less than 1 % involving civilian casualties in the US military engagement in Afghanistan.

³² Figure from: Megan Braun and Daniel R Brunstetter ‘Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim’ (2013) 12 *Journal of Military Ethics* 304, 312.

³³ *Ibid*, 314-5.

Figure 2: Types of drone strikes, CIA drones in Pakistan from 2004-2012³⁴

* Some of these strikes may have intended to kill a leader.

The reason for the dramatically different results of US drone strikes in Afghanistan and Pakistan lies within the different strategies and goals of the US military in Afghanistan and the CIA in Pakistan. The CIA pursues a different agenda in Afghanistan than the US military in Afghanistan. While the US military prioritises building up and securing trust within the local population, the CIA is engaged in counterterrorism missions in the so-called ‘War on Terror’.³⁵ Also, there is little information on evaluation standards in the CIA as they exist in the US Army.³⁶ However, as visible in the numbers shown above, there is a trend towards less civilian casualties. This trend is confirmed by recent numbers of US drone strikes in Pakistan showing almost no civilian casualties for the years 2013 to 2015.³⁷

³⁴ Ibid, 313.

³⁵ CIA, *The War on Terrorism*, (5 December 2015) CIA <<https://www.cia.gov/news-information/cia-the-war-on-terrorism>>; see also Gregory S McNeal, ‘Targeted Killing and Accountability’ (2014) 102 *The Georgetown Law Journal* 681, 754-5; Ian Shaw and Majed Akhter, ‘The Dronification of State Violence’ (2014) 46 *Critical Asian Studies* 211, 227-8.

³⁶ See also Alberto R Gonzales ‘Drones: The Power to Kill’ (2013) 82 *The George Washington Law Review* 1, 4-8.

³⁷ Data cited in Megan Braun and Daniel R Brunstetter ‘Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim’ (2013) 12 *Journal of Military Ethics* 304, 311-4.

III THE FOUR CORE PRINCIPLES OF LOAC

An international legal frame work for the use of drones in or outside combat does not exist. It, therefore, has to be examined by applying customary international law of armed conflict. Thus, the following chapter focuses on the four core principles of the laws of armed conflict: distinction, military necessity, unnecessary suffering, and proportionality. Without doubt, proportionality is the most controversial issue surrounding drone attacks.

4 Distinction

The principle that combatants and other actors in armed conflicts have to distinguish themselves from the civilian population is recognised in Articles 48, 51(2) and 52(2) of *Additional Protocol I* (for international armed conflicts) and similarly in Article 13(2) of *Additional Protocol II* (for non-international armed conflicts). Furthermore, the principle of distinction is state practice and constitutes customary international law.³⁸ It is therefore applicable in every armed conflict, regardless whether international or not.³⁹ The obligation resulting from this for the use of drones is clear. Drones need to be distinguishable from civilian aerial machines. Additionally, drones cannot be used to target civilians or civilian objects.⁴⁰ Regarding that of the CIA drone strikes in Pakistan 6 % even only killed civilians, there is reason for concern whether the CIA pays enough attention to the principle of distinction. Thus, the CIA strikes may have been unlawful. However, this is not a specific obligation arising from the use of *drones*. It is rather a general obligation for the use of any weapon. Finally, drones need to be operated by combatants who distinguish themselves from the civilian population. In practice, drones are operated from remote control centres some of which are even located within the state that is flying drone attacks. This means that for example a drone operating in Pakistan is controlled from within the USA. The controller is possibly a combatant and becomes a lawful target. While this is a problem concerning the question of conflict status,⁴¹ it is not a specific problem of the principle of distinction.

³⁸ International Committee of the Red Cross (ICRC), *The Principle of Distinction Between Civilians and Combatants* (17 November 2015) ICRC <https://www.icrc.org/customary-ihl/eng/docs/v1_cha_chapter1_rule1>.

³⁹ ICRC, *Customary International Law Overview* (29 October 2010) ICRC <<https://www.icrc.org/eng/war-and-law/treaties-customary-law/customary-law/overview-customary-law.htm>>.

⁴⁰ Craig Martin, 'A means-methods paradox and the legality of drone strikes in armed conflict' (2015) 19 *The International Journal of Human Rights* 142, 148.

⁴¹ For the question whether the US are part of the combat zone see Laurie R Blank, 'A Square Peg in a Round Hole: Stretching Law of War Detention Too Far' (2011) 63 *Rutgers Law Review* 1169, 1174-9.

5 Military Necessity

Military Necessity, first mentioned and defined in Art. 14 of the *1863 Lieber Code*, ‘permits a belligerent, subject to the laws of war, to apply any amount and kind of force to complete submission of the enemy with the least possible expenditure of time, life and money.[...] Destruction as an end in itself is a violation of international law.’⁴² It is nowadays recognised as customary law.⁴³ However, the principle remains ‘the most lawless of legal doctrines [...]’,⁴⁴ meaning that the principle of military necessity is highly influenced by two of the three other core principles, unnecessary suffering and proportionality.⁴⁵ It is difficult to look at the principle in isolation. Thus, it is likely that a specific drone attack does not comply with the principle of military necessity if it also does not comply with the principles of unnecessary suffering and proportionality. No specifically drone-related problems arise from the principle of military necessity itself.

6 Unnecessary Suffering

The principle of unnecessary suffering is customary law codified in Art. 35.2 of *Additional Protocol I to the Geneva Conventions*:

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

Examples of weapons that are regarded as causing unnecessary suffering are explosive bullets, poison and poisoned weapons, asphyxiating gases or glass-filled projectiles.⁴⁶ Drones, however, are usually equipped with ordinary missiles. Since a ‘weapon is not banned on the ground of ‘superfluous injury or unnecessary suffering’ merely because it causes ‘great’ or even ‘horrendous’ suffering’,⁴⁷ there is no doubt that drones do not fall into the category of weapons causing unnecessary suffering.

⁴² *United States v Wilhelm List et al.* (‘The Hostage Case’) (1948), XI TWC 1253-4.

⁴³ Gary D Solis, *The Law of Armed Conflict – International Humanitarian Law in War* (Cambridge University Press, 2010) 258.

⁴⁴ Alan M Dershowitz, *Shouting Fire: Civil Liberties in a Turbulent Age* (Little, Brown, 1st ed, 2002), 473.

⁴⁵ Gary D Solis, *The Law of Armed Conflict – International Humanitarian Law in War* (Cambridge University Press, 2010) 259.

⁴⁶ See only *Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare* (‘Geneva Protocol’) 1925.

⁴⁷ Yoram Dinstein, *The Conduct of Hostilities Under the Law of International Armed Conflict* (Cambridge University Press, 1st ed, 2004) 59.

7 Proportionality

The use of drones is mostly unproblematic under the three other core principles of the laws of armed conflict, distinction, military necessity, and unnecessary suffering. However, the remaining principle, proportionality, appears to be significant and controversial. The principle of proportionality is state practice and therefore customary international law.⁴⁸ It is, therefore, applicable in both international and non-international armed conflicts. It is codified in Art. 51(5)(b) of *Additional Protocol I*, and repeated in Art. 57. On the other hand, the principle is neither mentioned in Common Article 3 to the *1949 Geneva Conventions* nor in *Additional Protocol II*. It has been argued, however, that the principle of proportionality is inherent in the principle of humanity made applicable with *Additional Protocol II*.⁴⁹ Most recently, the principle has been included in Article 3(8)(c) of the *Amended Protocol II to the Convention on Certain Conventional Weapons* applicable in non-international armed conflicts.

7.1 *The Ambiguity of Proportionality*

The terminology of the principle of proportionality is kept vague. For example, Art. 51 (5)(b) of *Additional Protocol I* describes the following as indiscriminate:

an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.

While this at least describes which circumstances can be considered to assess the proportionality of an attack, the more important question of what would constitute ‘excessive’, remains.

7.2 *Standards to Evaluate the Proportionality of an Attack*

Several attempts have been made to properly assess the proportionality of an attack. Thus, it has been argued that drones are proportionate because of the high degree of precision of the weapons

⁴⁸ ICRC, *Rule 14. Proportionality of an Attack* (6 December 2015) Customary IHL <https://www.icrc.org/customary-ihl/eng/docs/v1_cha_chapter4_rule14>.

⁴⁹ Ibid; Michael Bothe, Karl J Patsch, Waldemar A Solf (eds), *New Rules for Victims of Armed Conflicts, Commentary on the Two 1977 Protocols Additional to the Geneva Conventions of 1949* (Martinus Nijhoff, 1982) 678.

(missiles).⁵⁰ As shown in the numbers of the US military drones in Afghanistan above, it is true that drones can be highly precise. This becomes even more apparent comparing drone missiles (usually Hellfire missiles) with other weapons. The blast radius is smaller and the technique for precise targeting is without equal.⁵¹ Another approach is that drones are proportionate because they are more effective regarding the minimisation of collateral damage compared to weapons used in other historic eras of warfare.⁵² However, saying that drones cause less collateral damage than bombs in the Second World War does not say much about the standards a drone strike nowadays should be assessed under.⁵³ Proportionality criteria must compare situations at the same time to produce a reasonable conclusion.⁵⁴ The last approach justifies the use of drones on the basis that they are proportionate compared to other tactics in war.⁵⁵ However, this approach lacks a sufficiently comparable technique, circumstances and military knowledge in the particular situations between the operations and tactics being compared.⁵⁶

⁵⁰ John O Brennan, *Speech on Counterterrorism* (30 April 2012) Council on Foreign Relations <<http://www.cfr.org/counterterrorism/brennans-speech-counterterrorism-april-2012/p28100>>; Kenneth Anderson, 'Efficiency in Bello and ad Bellum: Making the Use of Force Too Easy?' in Claire Finkelstein, Jens D Ohlin and Andrew Altman (eds), *Targeted Killings: Law and Morality in an Asymmetrical World* (Oxford University Press, 2012) 374, 388; for a general list of positive features of drones see Craig Martin, 'A means-methods paradox and the legality of drone strikes in armed conflict' (2015) 19 *The International Journal of Human Rights* 142, 157-8.

⁵¹ Chairman, Joint Chiefs of Staff, *Joint Targeting Cycle and Collateral Damage Estimation Methodology* (10 November 2009) American Civil Liberties Union <https://www.aclu.org/files/dronefoia/dod/drone_dod_ACLU_DRONES_JOINT_STAFF_SLIDES_1-47.pdf>; see also Henry Crumpton, *The Art of Intelligence: Lessons from a Life in the CIA's Clandestine Service* (Penguin Press, 2012) 220; Daniel Klaidmann, *Kill or Capture: The War on Terror and the Soul of the Obama Presidency* (Houghton Mifflin Harcourt, 2012) 120.

⁵² Gwyn Prins, 'Conditions for Jus in Peace in the Face of Future' in Charles Reed and David Ryall (eds), *The price of Peace: Just War in the Twenty-First Century* (Cambridge University Press, 2007) 236, 236-54; Kenneth Anderson, 'Efficiency in Bello and ad Bellum: Making the Use of Force Too Easy?' in Claire Finkelstein, Jens D Ohlin and Andrew Altman (eds), *Targeted Killings: Law and Morality in an Asymmetrical World* (Oxford University Press, 2012) 374, 383-4; see also Thomas Hurka, 'Proportionality in the Morality of War' (2005) 33 *Philosophy and Public Affairs* 34.

⁵³ Megan Braun and Daniel R Brunstetter 'Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim' (2013) 12 *Journal of Military Ethics* 304, 309.

⁵⁴ Ibid.

⁵⁵ Avery Plaw, 'Counting the Dead: The Proportionality of Predation in Pakistan' in Bradley J Strawser (ed), *Killing by remote Control: The Ethics of an Unmanned Military* (Oxford University Press, 2013) 123, 144, 147.

⁵⁶ Megan Braun and Daniel R Brunstetter 'Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim' (2013) 12 *Journal of Military Ethics* 304, 309.

Braun and Brunstetter argue convincingly that all of these approaches misunderstand the very nature of proportionality.⁵⁷ Merely because drones are “more proportionate” than other types of weapons, other historic eras of war or other tactics does not mean that drones themselves are necessarily proportionate.⁵⁸ They call these approaches ‘proportionality relativism’.⁵⁹ Also, these approaches have the potential to loosen proportionality standards since they depict drones as a means of ‘last resort[...] justifying gratuitous use of force.’⁶⁰

Considering the above as well as the fact that drones can be very precise, it becomes obvious that the proportionality of drones can only be assessed on the basis of comparing similar situations in which drones were used with a similar or different outcome. It is the application by humans that is crucial for determining whether an attack was proportionate or not. Numbers of civilian casualties as provided above are an indicator for the proportionality of an attack. However, considering that there can be a great difference in the value of an attack for short-term goals and long-term goals, the question remains whether it is legally necessary or at least allowable to take long-term effects into consideration for the proportionality of an attack. Art. 51(5)(b) of *Additional Protocol I* limits the application of the principle of proportionality to the ‘concrete and direct military advantage anticipated’. Thus, for the retrospective determination of the proportionality of an attack only the short-term effects are relevant. This does not mean, however, that long-term effects do not play any role in assessing whether there need to be legal restrictions on the use of drones.

7.3 *Applying Proportionality to the Use of US Drones in Afghanistan and Pakistan*

Considering the applicable standard of proportionality as set out above, there are multiple answers to the question whether the use of drones in Afghanistan and Pakistan by the US Army and the CIA respectively are proportionate. It is likely that the drone strikes conducted by the US military in Afghanistan with civilian collateral damage in less than 1 % of the strikes fulfil the principle of proportionality if the strict and narrow interpretation is applied. Arguably, the result could change taking into account the long-term effects on the military strategy and relationship between the US and Afghanistan as outlined above. On the other hand, the drone strikes of the CIA in Pakistan caused civilian casualties in 23 % of the strikes in average. Compared to the drone strikes in Afghanistan, this number is sufficiently high to argue that this has overstepped the line of legality. Furthermore, taking into account long-term effects, it is likely that these will intensify the problems

⁵⁷ Ibid 306.

⁵⁸ Ibid 306-7.

⁵⁹ Ibid.

⁶⁰ Ibid 309.

as the number of civilian casualties increases. However, a definite conclusion cannot be drawn since one would need to evaluate every single drone strike. This would require more information on the drone strike than is currently available.

IV A LEGAL FRAMEWORK SHOULD BE CREATED FOR THE USE OF DRONES IN AND OUTSIDE COMBAT

This paper showed that there are serious concerns about the legality of drone strikes if conducted without the necessary care. However, the paper also showed that there are serious concerns about the efficacy of drones looking at long-term effects, irrespective of the legal impact of this finding. Both of these findings lead to the question whether the use of drones should be regulated under international law. With great power always comes great responsibility, which is the reason why the response to the question of legal regulation should be yes. It is a moral but also political obligation to take precautions before it is too late.⁶¹ However, from a practical point of view, it has to be admitted that such a regulation is very unlikely to come into existence. The reasons for this are as obvious as they are simple. Firstly, the states that might profit from higher proportionality standards, including Afghanistan or Pakistan are in a far weaker position to negotiate than the states that are currently in possession of advanced drone technology. Secondly, it is unlikely that states like the US will voluntarily give up the power and privilege that drones give them at the moment. Finally, economically and militarily weak countries such as Pakistan and Afghanistan will not give up their theoretical opportunity to gain access to drones while it is likely that states like the US will keep their drones and programs despite international regulations. Thus, the paper argues on a theoretical basis rather than on a practical one. It outlines an ideal rather than a solution that would eventually be the outcome of long negotiations between several states on the international stage.

8.1 Jus Ad Vim and Jus Ad Bellum

From analysing the numbers provided for the CIA drone strikes in Pakistan and the serious socio-political concerns arising from this excessive use of drones, it results that the current legal framework for going to war, Jus ad Bellum, does not sufficiently regulate acts short of war.⁶² If one does not follow the US proposition that their counterterrorism engagement constitutes a traditional

⁶¹ Daniel R Brunstetter and Megan Braun, 'The Implications of Drones on the Just War Tradition' (2011) 25 *Ethics & International Affairs* 337, 355.

⁶² Megan Braun and Daniel R Brunstetter 'Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim' (2013) 12 *Journal of Military Ethics* 304, 316-7.

international armed conflict,⁶³ then there is no law left to regulate these acts short of war.⁶⁴ Demanding legal regulation for counterterrorism programs of course implies that these should be made legal under certain circumstances. This is a position that can be rejected for good reasons. However, the counterterrorism programs already exist even though they might violate international law.⁶⁵ Demanding a legal regulation, therefore, does not allow the existence in the first place but is a response to reality. The point in time where the existence of these programs could have been anticipated is gone. Now it is time to regulate what is already there.

Legal scholars like Walzer introduced a category called ‘Jus ad Vim’ to set out moral and legal standards that regulate the use of force in acts short of war. It is a category that is more permissive than ‘Jus ad bellum’ but not ‘overly tolerant’.⁶⁶ It understands the use of force in acts short of war as a last resort.⁶⁷ Once this threshold is reached, standards for the legality of the use of force are proportionality and the probability of escalation.⁶⁸ The overall proposition is to introduce a legal category which makes it harder to use force in acts short of war and applies higher proportionality standards to make sure that the conflict entered into by using force will not escalate into an actual armed conflict.⁶⁹ This, in particular, considers international human rights law which still applies in these contexts.⁷⁰ Following this proposition, it is desirable to establish certain minimum standards with respect to proportionality for the use of drones to avoid an outcome as currently seen in the statistics concerning the CIA drones in Pakistan.

⁶³ Laurie R Blank, ‘A Square Peg in a Round Hole: Stretching Law of War Detention Too Far’ (2011) 63 *Rutgers Law Review* 1169, 1174-9; Thomas Gregory, ‘Drones, Targeted Killings, and the Limitations of International Law’ [2015] *International Political Sociology* 9, 202.

⁶⁴ Laurie R Blank, ‘A Square Peg in a Round Hole: Stretching Law of War Detention Too Far’ (2011) 63 *Rutgers Law Review* 1169, 1174-79; Daniel R Brunstetter and Megan Braun, ‘From *Jus ad Bellum* to *Jus ad Vim*: Recalibrating Our Understanding of the Moral Use of Force’ (2013) 27 *Ethics & International Affairs* 87, 92-5.

⁶⁵ See Megan Braun and Daniel R Brunstetter ‘Rethinking the Criterion for Assessing CIA-Targeted Killings: Drones, Proportionality and Jus ad Vim’ (2013) 12 *Journal of Military Ethics* 304, 315-6, who argue that the CIA drone strikes might be disproportionate; for the aspect of jus ad bellum see Daniel R Brunstetter and Megan Braun, ‘From *Jus ad Bellum* to *Jus ad Vim*: Recalibrating Our Understanding of the Moral Use of Force’ (2013) 27 *Ethics & International Affairs* 87, 88-90; Laurie R Blank, ‘A Square Peg in a Round Hole: Stretching Law of War Detention Too Far’ (2011) 63 *Rutgers Law Review* 1169, 1174-9.

⁶⁶ Michael Walzer, ‘Regime Change and Just War’ (2006) 53 *Dissent* 103, 103-8.

⁶⁷ Daniel R Brunstetter and Megan Braun, ‘From *Jus ad Bellum* to *Jus ad Vim*: Recalibrating Our Understanding of the Moral Use of Force’ (2013) 27 *Ethics & International Affairs* 87, 95-7

⁶⁸ *Ibid* 97-100.

⁶⁹ *Ibid*.

⁷⁰ *Ibid* 90-2.

8.2 *Legal Restrictions for The Use of Drones in Combat*

Although the more concerning numbers are those of the CIA drones in Pakistan, there is still good reason to also restrict the use of drones in combat itself. This paper demonstrated that the low number of civilian casualties in the US military drones in Afghanistan results from strict protocols inside the US military. However, the paper also illustrated that drones can have a devastating effect on civilians if applied without a high degree of care. In addition, the socio-political effects of drone strikes, especially the long-term effects, are reason for concern regardless of the conflict status. Thus, minimum express proportionality standards for the use of drones are also desirable in international armed conflicts.

V CONCLUSION

The necessity to regulate the use of drones in and outside combat arises from three different circumstances. Firstly, the socio-political effects of drone strikes, especially the long-term effects, give serious reason for concern about the efficacy of drone strikes in general. Secondly, depending on the way they are applied, drone strikes can have a devastating effect on civilian lives and infrastructure possibly resulting in the illegality of certain attacks applying the principle of proportionality. Finally, the current trend in international warfare towards more and more engagement in acts short of war against terrorism, which shows a general change in symmetry and nature of international armed conflicts, is still more or less unregulated under international law. This paper argued that the use of drones in modern warfare needs to be regulated, in and outside combat, because the threats drones create already exist. This makes it necessary to react before it is too late. This paper appeals to the responsible actors on the international stage to face reality and take moral and political responsibility for future generations.