

**Armed Drones in Modern Warfare: Ethical Issues
and Challenges to International Humanitarian Law**

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By

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**DEPARTMENT OF PEACE AND CONFLICT
STUDIES AND MANAGEMENT**

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I, **Kabindra Sharma**, hereby declare that the research work embodied in the dissertation titled "**Armed Drones in Modern Warfare: Ethical Issues and Challenges to International Humanitarian Law**" submitted to Sikkim University for the award degree of Masters of Philosophy, is my original work and it has not been submitted earlier to this or any other University for any degree.

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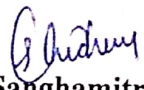
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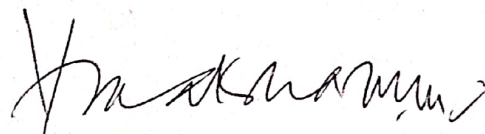
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I recommend this dissertation to be placed before the examiners for evaluation.


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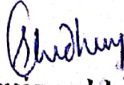
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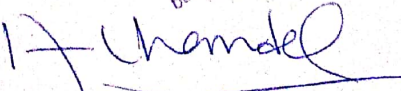
“Armed Drones in Modern Warfare: Ethical Issues and Challenges to International Humanitarian Law”

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*This dissertation is dedicated to my Amma and Baba.
For their unconditional love, support and motivation*

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Principle of distinction

Principle of Proportionality

Unnecessary Suffering

Military Necessity

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Introduction

Just War Theory and Armed Drone

Origins of Just War Theory

JUS AD BELLUM

Last resort

Reasonable chance of success

Right Intention

Legitimate authority

Just cause

Declaration

JUS IN BELLO

Discrimination

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Introduction

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Abbreviations

AUMF	Authorization of Use of Military Force
AQAP	Al Qaeda in the Arabian Peninsula
CNN	Cable News Network
CIA	Central Investigating Agency
FBI	Federal Bureau of Investigation
FATA	Federally Administered Tribal Area
JWT	Just War Theory
IAC	International Armed Conflict
ICRC	The International Committee of the Red Cross
ILF	International Legal Framework
IHL	International Humanitarian Law
NATO	North Atlantic Treaty Organization
NIAC	Non-International Armed Conflict
OHCHR	Office of the United Nations High Commissioner for Human Rights
SEAD	Suppression of Enemy Air Defence
TBIJ	The Bureau of Investigative Journal
UN	United Nations
UNIDR	United Nations Institute for Disarmament Research
UNODA	United Nations Office for Disarmament Affairs
USA	United States of America
WW-II	World War II
WMD	Weapons of Mass Destruction

Chapter 1

Introduction

Armed drone is an aircraft without a human pilot aboard. It is generally controlled remotely by a person sitting at a distance from the place of the flight. The combat version of drone is used to carry air operations like the bombing of ground targets. There are different types of drones based on their size, endurance, purpose, and altitude. Modern military drones come in a range of sizes and Shapes. Some are 8 inches long Wasp Macro drone with a range of five nautical miles, to the 44-foot-long local Hawk with a range of 5,400 nautical miles.

Armed drone, have been widely used since the new millennium. Modern warfare has undergone a significant transformation in the last two decades. Being more cost effective and target oriented, technology today makes an attempt to enable deeper and more comprehensive conflict resolution. In the present century, there is a growing interest in drone in most of the developed and developing states. Presently, armed drones are proving as an efficient application for a wide spectrum of military missions. Three factors account for why drones have become the favored tool in modern warfare: i) their risk-averse nature; ii) their cost-effectiveness, and iii) their technologically advanced precision. On risk, drones armed with Hellfire missile typically engage targets from 10,000 feet, while its pilot operates from a safe 'battlefield' distance thousands of miles away. In short, risk has been effectively eradicated as a combat deterrent. On cost, drones are far cheaper than manned systems. The total cost of the popular Reaper drone is \$54 million; by comparison, the cost of a B2 bomber is upwards of \$1.2 billion. On precision, the drone is considered both technologically and methodologically superior

to manned fighter jets. Several factors account for this, including the slow flight-speed of drones, their instantaneous and quality video feed, and their ability to circle the same target for as many as forty hours without refueling. Nowadays, armed drones have turned into the new face of war. It is one of the most sought after and 'favored weapon' in the present conflicts being fought in the Middle east and South Asia due to its supposed visual superiority. Armed drones have been increasingly used by the United States and NATO in Counterinsurgency operations, to kill suspected terrorists and militants especially in carrying out pre-emptive strikes, surveillance on specific locations as well as eliminating threats.

In the recent years the rampant use of armed drones to kill the leaders or members of terrorist group has raised a broad debate on the legal aspect of such use (particularly, under IHL) and on the ethical grounds of killings of terrorists by armed drones. This debate is not happening only with the experts but also amongst the media group's, NGO's and civil societies across the globe.

Theoretical Framework

Related to ethics and Modern Warfare there are many theories in International Relations/Political Science/Peace Studies such as Just War Theory, Realism and Liberalism. In the context of this research, the theories, for instance, Just War Theory has been applied throughout. Just War Theory, like the very idea of ethics, is rooted in the concept of common humanity. It stems from the notion that even in the most extreme situations of warfare, there are certain principles that ought to guide our conduct. This theory dates back its origin to the Indian epic the Mahabharata, which proposes a number of rules for the conduct of war. In the West, these principles have their roots in the philosophy of Plato and Aristotle. This theory gained much popularity through the works of St. Augustine and Thomas Aquinas (in his Summa Theologica).

The theory has been the backbone of this research to deal with ethical issues and legal issues.

Literature Review

Armed drones have become the subject of intense debate. Much of this debate is focused on armed drones, on the ethical issues and challenges to International Humanitarian Law.

There is not much literature on armed drone and modern warfare, as the technology attached to armed drone is relatively new. Nonetheless, existing literature about the armed drones, which is important for the study, has been consulted to understand the various dimensions of its usage in the best possible manner. Still, there are few books and articles that closely address this subject matter.

Amongst the available literature gathered for the study, the researcher has divided them thematically into three sections. The first section deals with the literature that has dealt with legal considerations of armed drones. The second section deals with literature that has dealt with ethical issues related to armed drones. The third section deals with literature that has dealt with the future of drone warfare.

Legal Considerations of Armed Drones

While the law of weaponry is an area of International Humanitarian Law which has not been much scrutinized by renowned international lawyers, certain weapons including in particular, armed drone weapon system have recently become the subject of much literature. The steady rise in use of armed drones in modern times, in particular, has attracted much research from renown international lawyers, Strategic/Security thinkers and International relations scholars.

Jus in Bello is the term for just conduct in war. *Jus in Bello* includes the concepts of proportionality and discrimination (Lango, 2014). Many experts do not believe

autonomous and remotely piloted drones can comply with the proportionality requirement to limit collateral damage to what is necessary to achieve the military objective (Sparrow, 2015; UNIDR, 2014). There is doubt concerning their ability to limit civilian deaths. Additionally, autonomous robots cannot understand the finality of death and cannot make an ethical decision on how much civilian death is acceptable (Springer, 2013).

Experts also assert that autonomous drones cannot comply with the requirement for discrimination in *Jus in Bello*. Discrimination means that non-combatants must not be targeted. The Second Pillar of International Humanitarian Law prohibits weapons that cannot discriminate. International Humanitarian Law Article 48 Additional Protocol I require parties to armed conflict to distinguish between civilian people and property and military people and objects (UNODA, 2015). Another aspect of discrimination is that people are no longer combatants if they surrender. One of the most important requirements of Additional Protocol I, Article 41 of the Geneva Convention is that *hors de combat* can't not be made the target of an attack under any circumstances. *Hors de combat* refers to a condition where combatants have clearly expressed a desire to surrender, abstain from hostile acts, and do not attempt escape (Sparrow, 2015). A robot must not only be able to determine who is or is not a combatant but also must be able to read the intentions of someone trying to surrender. For international laws to be effective, those who violate them should be punished. The United Kingdom accepted non-governmental organization Article 36 requiring meaningful human control over attacks (UNIDR, 2014). They recognized that mobile autonomous weapons need a higher level of human control to adhere to International Humanitarian Law requirements for distinction and proportionality. International law in its current form is not sufficient to deal with the new phenomena that have arisen with the use of Armed

drones. It's a high time to devise new legal framework to deal with the challenges posed by modern terrorism and use of armed drones (Kretzmer, 2005).

On the other-hand Boyle outrightly rejects the argument of scholars that armed drone technologies are a new technological innovation which requires an urgent revision of the laws of war. He instead argues that legal and ethical/moral challenges have arisen from the recent use of armed drones by the US government and its policy of killing suspected terrorists (Boyle, 2015). In the similar fashion, Melzer argues that International Humanitarian Law in the current form is more than sufficient to deal with the lawfulness of killings of suspected terrorists there is no need to devise new legal framework (Melzer, 2008).

Ethical Issues of Armed Drones

The ethical considerations of drone strikes are extensive and worrying, centered mainly on the diminishing human penalties of engaging in battle if a nation no longer has to commit personnel (Heatherly, 2014). The use of drones by Obama administration has created the impression that killing suspects through drone strike is a more effective option than to deal with them through the lengthy justice system (McCrisken, 2013). The use of drones in targeted strikes also bears the question of whose lives matter. American life has been valued over other forms of life in American security strategies since the nineteen-thirties. Former Secretary of Defense Robert Gates described the effects of this and how drones have made wars seem 'bloodless, painless, and odorless', with their practice desensitizing us to war and dehumanizing the concept (Horowitz, 2016). In the FATA, when the numbers of surgical and signature strike by armed drones increased, there was a commensurate increase in the quantum of collateral damage. Whatever be the strategic virtues of these tactics, they come at a heavy moral cost in terms of the loss of innocent human life (Miller, 2014). If drone warfare is doing more

harm than good, it is because of the way this weapon is being used, not drones themselves (Strawser, 2012). Continued and increased use is likely to generate more challenges than solutions, and perhaps do more harm than good (Enemark, 2014). Drone strikes do not offer any long-term solution to violence; rather, they appear to interrupt militant operations temporarily. There is no data to support the argument that drone strike causes a decrease in violence. Those who justify the use of armed drones, their view is somewhat similar to the argument for the dropping of the atomic bombs on Japan in WW II (Jha, 2014). Choudhury talks about the lives of women in armed conflict. She argues in armed conflict lack of space for women in public sphere become more significant. Dropping out of school, migration for socio-economic reasons, employment breaks, loss of control over material resources, physical assault, poor health facilities, and breaks in family ties are some of the repercussions of armed conflict (Choudhury, 2017).

Future of Armed Drone Warfare

Sebastian Kaempf discusses the emergence of asymmetrical risk-free modern warfare with the advent of Armed Drones. He argues that modern warfare has gradually changed the Post-Vietnam War into risk-free warfare largely due to the rise of America as a postmodern society structured around the avoidance and management of risks. Distributional conflicts over 'goods' such as jobs, social security, and income (which dictated the traditional agenda of modern politics) have given way to distributional conflicts over 'bads' that is, the risks created by threats to individual life, health, and well-being and led to rise heroic to Post Heroic warfare (Kaempf, 2014). Peter W. Singer uses the term 'Super Empowered Individuals' to describe how information and robots have created the possibility of Knowledge Enabled Mass Destruction (Singer, 2009). He argues that, in the future, one person could control armed drones and wreak

havoc. Another concept he foresees is the use of mother ships to launch drones. These mother ships allow for centralized control and dispersed firepower (Singer, 2009). Paul J. Springer discusses several future concepts in his book *Military Robots and Drones*. First, he sees a role for autonomous drones in a Suppression of Enemy Air Defense (SEAD) role. SEAD drones would provide a cheap, low-risk solution to exhaust enemy air defenses. Without a man in the loop, their fast reaction time gives them the advantage. Springer also postulates that the first nation to utilize their systems in a fully autonomous manner would be able to gain a short-term advantage. Having a man in the loop is becoming the limiting factor of system performance concerning time (Springer, 2013). Veronica Ma argues that the rate of technological progress in warfare only increases as time goes on. With each breakthrough and discovery, the willingness of nations to embrace robotics and enhancement only increases. Just as the decree of Pope Innocent II failed to actually stop soldiers from using the crossbow, a simple rejection of autonomy and enhancement will do nothing to ensure a stable future of warfare (Ma, 2016). Chamayou is of the opinion that armed drones have brought change towards a hunt-warfare doctrine that focuses more on killing individuals who are identified as potential threats, rather than territorial control. He further argues that the use of armed drones has removed risk factor that has resulted in a military ethos that gives more importance on combatant immunity over non-combatant immunity (Chamayou, 2015). Perhaps the most thoughtful discussion on future armed drone use in war comes from Scharre's report, *Robotics on the Battlefield Part II: The Coming Swarm*. He foresees two paradigm shifts. First is the aggregate qualitative superiority of dispersing combat power over a greater number of platforms. By spreading out combat power, one increases force resiliency and diversity while increasing the cost of interdiction on an adversary. Second, he sees the human role as supervisory at the command level,

overseeing multiple unmanned vehicles maneuvering and performing tasks autonomously (Scharre, 2014). Another future concept he explores is termed 'Flash War' where opposing autonomous machines engage each other and their actions outpace the decision-making capacity of policy-makers (Scharre, 2014).

Rationale and Scope of the Study

This research draws its rationale from the debates that the Armed Drones targeted killings are not consistent with the legal framework and they are violating International Humanitarian law and are not consistent with the basic principles of Just War Theory. The inquiry attempts to fulfil the purpose of giving a general overview of the covert armed drone program intended to thwart militant and terrorist planning and activity and how has it become so controversial since its inception in the new millennium. This research also tries to analyze the growing use of armed drones in the modern warfare keeping in mind that this approach to war which is known as remote warfare/riskless warfare has given rise to the killings of innocent civilians and debar states from being held accountable throwing light into the ethical issues related to this form of modern warfare. This study is to provide strategists/researcher greater clarity on the ethical or moral issues and challenges to International Humanitarian Law surrounding deployment of armed drones.

Objectives

- To assess the use of armed drones in modern warfare.
- To analyze the use of armed drones and their compatibility with regard to International Humanitarian Law.
- To analyze the moral and ethical issues related to armed drone warfare.
- To assess the use of armed drones as the weapons of Future Warfare.

Research Questions

- What are the justifications of using armed drones in modern warfare?
- Is the use of armed drones compatible with International Humanitarian law?
- What are the ethical and moral issues with respect to armed drones in modern warfare?
- Whether armed drones are taking modern warfare to riskless and asymmetric warfare?

Research Methodology

This study is predominantly qualitative and descriptive. It has been carried out on analytical method to an extent to analyze the impact of usage of armed drones on international humanitarian law focusing on ethical implications in modern warfare. usage of armed drones is considered as independent variable (IV) and international humanitarian law and ethics as dependent variable (DV) and the study assesses the impact of using armed drones on international humanitarian law and ethics. Books and articles from eminent scholars have been referred to and theories of peace studies and of International relations used to support the arguments and to relate it with the theories. Declassified or open documents, records of the governments, the official statements and documents published in national dailies along with experts' comments and interviews are treated as a primary source for the research. The available opinions from individuals, institutions, think tanks or review of literature along with the documents related to armed drones from specialized army/defense libraries have been the secondary source of the research. Ethical norms followed in the social science research have been strictly adhered while conducting this research.

Chapterisation

Chapter- 1: Introduction

The chapter offers an overview of this research including general introduction to research area, the rationale and scope of the study, theoretical framework, major research questions and research methodology.

Chapter- 2: Armed Drones and International Humanitarian Law

This chapter helps us to assess the justification of the use of armed drones in modern warfare. It also analyzes the challenges posed by the use of armed drones to the IHL along with the compliance of use of armed drones with basic principles of IHL.

Chapter- 3: Moral and Ethical Issues Related to Armed Drones

This chapter deals with the ethical and moral issues related to the use of armed drones. It gives us an understanding of ethical and moral issues with regard to the use of armed drones in Modern Warfare.

Chapter- 4: Armed Drone and Future Warfare

This chapter deals with armed drones as a weapon of next-generation warfare. This chapter highlights how armed drones are evolving as the weapon of next-generation warfare in the contemporary world. It helps us to understand how armed drones are taking modern warfare from heroic to post heroic warfare.

Chapter- 5: Conclusion

Concluding chapter summarize the research work with findings and recommendations for future researchers/policy makers.

Chapter 2

Armed Drones and International Humanitarian Law

Introduction

Armed Drone is an aircraft without a human pilot on board, and its flight is controlled under the remote control of a pilot on the ground station/base. It has the potential to carry a lethal or nonlethal payload, although it is banned for them to carry nuclear, biological or chemical weapons, as dictated by IHL. In the recent years, the rampant use of armed drones by states for counterterrorism activities is not a particularly new phenomenon in the international arena and has been occurring for more than a decade. As a result, it has been widely accepted that the armed drones are not illegal weapons in themselves and they often depending on a different circumstances offer significant strategic advantages to the states such as their high precision in targeting military and the fact that they pose a very low risk to the person who is operating the armed drone (Rosén, 2014). They provide the user with certain advantages, such as maximizing the influence over the area of combat and minimizing the damage to the troops which has gave rise to the concept of post-heroic warfare. Armed drones represent the most accurate and complex scheme of deadly power ever known, the ideal tool for airborne warfare (Jha, 2014). The classification of strikes into personality and signature strikes has confirmed this status. Personality strikes refer to armed drone strikes specifically targeting an identified individual. If a known terrorist leader whose identity and location have been established by intelligence efforts is targeted that's an example of personality strikes. Contrary to personality strikes, signature strikes identify multiple suspicious

targets and attacks them depending on behavioral patterns or geographical locations. Targets in a signature strike do not have to be confirmed before a strike, meaning that there are numerous cases where the military has been completely unaware of who was targeted (Byman, 2013). Signature strikes are intrinsically linked to targeted killings, as their indiscrimination regularly leads to the slaughter of crowds of civilians and the fusing of unidentifiable flesh with metal and human debris (Gusterson, 2019). Worryingly, it seems unlikely for this process to be appropriately managed, as armed drone technology is marching towards the point where armed drones themselves can now suggest targets or objects of interest based. Although armed drones may look similar to conventional aircraft in appearance, the difference lies in that they are unmanned and the operators control it remotely to deploy the lethal force whilst seated thousands mile away. This is partly what makes the use of armed drones for counterterrorism of targeted killings as controversial as there is a possibility of operator developing a play station mentality to killing (Keene, 2015).

Importance of Armed Drones in Modern Warfare

Armed Drones are used on the offensive, due to their nature in making war almost entirely risk-free and therefore reducing the stakes that are usually experienced. The armed drone pilot is unsusceptible to harm and collateral damage is also expected to be comparatively low (Williams, 2013). It is very interesting to assess armed drones and their benefits within the context of military history, as war has always been a powerful incentive for technological innovation. Now technology is on the verge of replacing the human soldier altogether with consequences we can barely imagine. Furthermore, humans are traditionally vulnerable in war as they are affected by the natural elements, often become fearful and exhausted and do not respond as quickly as machines. Therefore, armed drones are very useful complement to multidimensional strategies

that can yield game-changing interventions in the fight against terrorism (Attuquayefio, 2014). Over its short period of existence, armed drone accuracy has increased extensively. Armed Drones provide precise and up-to-date information on the enemy's location, behavior, and resources, establishing a new dimension in intelligence, reconnaissance and surveillance (Martinic, 2016). They can collect multiple forms of data including visual, infrared, signals intelligence, three-dimensional mapping, and facial recognition records. For the US, armed drones allow access to multiple areas of international contention, to manage the rapid expansion of terrorist groups and non-state actor threats (Bowden, 2013). There have also been developments of armed drone swarms-bodies of thirty-odd armed drones operating together as a collective unit with the capability to absorb multiple strikes and continue their operations (Hambling, 2016). Armed drones can hover for over fourteen hours and are simply replaced when battery or fuel power diminishes. These continuing technological developments highlight dissatisfaction with the current advantages armed drones offer for self-defense, giving credibility to the argument that it is, in fact, offensive features of drones that are being researched and progressed.

Current Debates regarding the use of Armed Drones

There are real and key differences between armed drones like Reapers and Predators and conventional aircraft like Rafale or F-15s. These key differences between armed drones and conventional aircrafts are having significant impact on the way armed conflict is being fought in the modern times, and arguably on long-term peace and security. The fact that nations can engage in warfare without risk to their personnel, together with the increased persistence that armed drones give has both tactical and strategic implications.

Discussion regarding the use of armed drones at the United Nations has involved all relevant structures, including the General Assembly and Human Rights Council. United Nation's Special Rapporteur, on Extrajudicial, Arbitrary executions, Christof Heyns, has stressed that issue related to the lack of transparency and accountability surrounding the deployment of armed drones undermines the rule of law and may have repercussion on international security. He furthermore stresses that the accountability for violations of International humanitarian law (IHL) does not matter of choice or policy but rather a duty under both domestic and international law, and the duty must be upheld (ohchr, 2013). Despite the assertions that armed drones enable US to better control the consequences of aerial bombing, data gathered by journalists and casualty recording organizations show a large number of civilian casualties from armed drone strikes. If we take the case of Pakistan for example, where most of armed drone strikes were exclusively carried out by US, as per the reports of TBIJ between 420-960 civilians were killed in just over 400 armed drone strikes although the innocent civilian casualty rate along with the number of strikes has dropped since 2012 following a growing public outcry over the use of armed drones and killings of innocent non-combatants (The Bureau of Investigative Journal, 2013). Armed Drone advocates often outrightly rejects the civilian casualty figures arguing that they are falsehoods spread by the enemy; that weapons are being removed from the site of a strike before recorders arrive, or even that Taliban or Al Qaeda kill civilians and place their bodies at the site of armed drone attacks to increase civilian casualty count. There is simply no evidence for this whatsoever.

The Argument in Favor for Use of Armed Drones

The advocators of the armed drone campaign argue that those in the west who are not in favor are naïve and have selective memories. They have deliberately overlooked or

forgotten, the hundreds of suicide bombings in Pakistan and Afghanistan that slain or maimed scores and the horrors of 9/11 and the 7/7 bombings in London, which were carried out by al Qaeda linked militants trained in FATA or Afghanistan's tribal lands (Williams, 2013, p.170). An activist who speaks against the armed drones also seems to live in an alternative universe where talk of bonafide terrorists who been targeted and killed by armed drones simply do not exist. Instead, there is a total focus on unintentional civilian casualties that result from strikes on these unmentioned terrorists. Had the FATA trained Faisal Shahzad successfully set off his bomb in times square or had Fata based Rashid Rauf blown up numerous passenger jets with liquid bombs, many of anti-armed drone voices in the western world have been muted, if not the salient (Williams, 2013, p.170).

Those in Pakistan who are against the drones forget that the Taliban have deliberately killed thousands of their compatriots on a yearly basis. The armed drones are the front-line defense of Pakistani civilians, who are threatened by terrorists living in de facto Taliban terrorist state in the FATA (Williams, 2013).

If we have gazed through the historical evidence to look into the examples of armed drones in saving the lives of civilians it would be the case of Mumbai-style terrorist plot in Europe that was efficiently disrupted by armed drones. As the FATA-based terrorists plotted to use bombs and automatic weapons to slaughter civilians in France, Germany, and Britain, they themselves were hunted down and killed by armed drones, thus countless civilian lives were spared. Grateful British security officials subsequently downgraded their terrorism level and said, Strikes have decimated the Al Qaeda senior leadership, and we didn't have to get directly involved (Somaiya, 2013). In the similar fashion Williams in his works shares his experience in Afghanistan in 2009 with the Afghan National Directorate of Security, he discovered that most suicide

bombers in Afghanistan were trained in madrassas and terrorist camps in the FATA. Youths were trained to be Mullah Omar's missile; the suicide bombers were sent into Afghanistan to detonate their explosives and slaughter Afghan civilians. The Afghan police and intelligence officers all applauded the armed drones for disrupting the potential Taliban terrorist plots and killing future suicide bombers and terrorists before they could make their way to Afghanistan to wreak havoc on civilians (Williams, 2013). One person supporting the armed drone strikes against the terrorist posted a comment on Dawn's website: Innocent women and children are also dying in our neighborhoods, kindergarten schools and in our shopping malls in suicide attacks. I don't think they deserve to die either. I guess armed drone attacks are good as long as they are killing those terrorists and terrorist sympathizers. Maybe you will understand this when somebody from your neighborhood dies in a suicide attack (Paracha, 2011).

Another Pakistani civilian wrote in Dawn condemning the suicide bombers while condoning the armed drones: I have often wondered about the callous hypocrisy. If we condemn the Americans so vociferously over the armed drone campaign, should we not be more critical of the thugs who are killing far more Pakistani civilians? (Haider, 2014). And yet it seems that our more popular Urdu anchorpersons and TV chat show guests reserve their outrage for Washington while giving Taliban and Al Qaeda a free pass over their vicious suicide bombings that have taken hundreds of innocent lives in recent weeks (Husian, 2010).

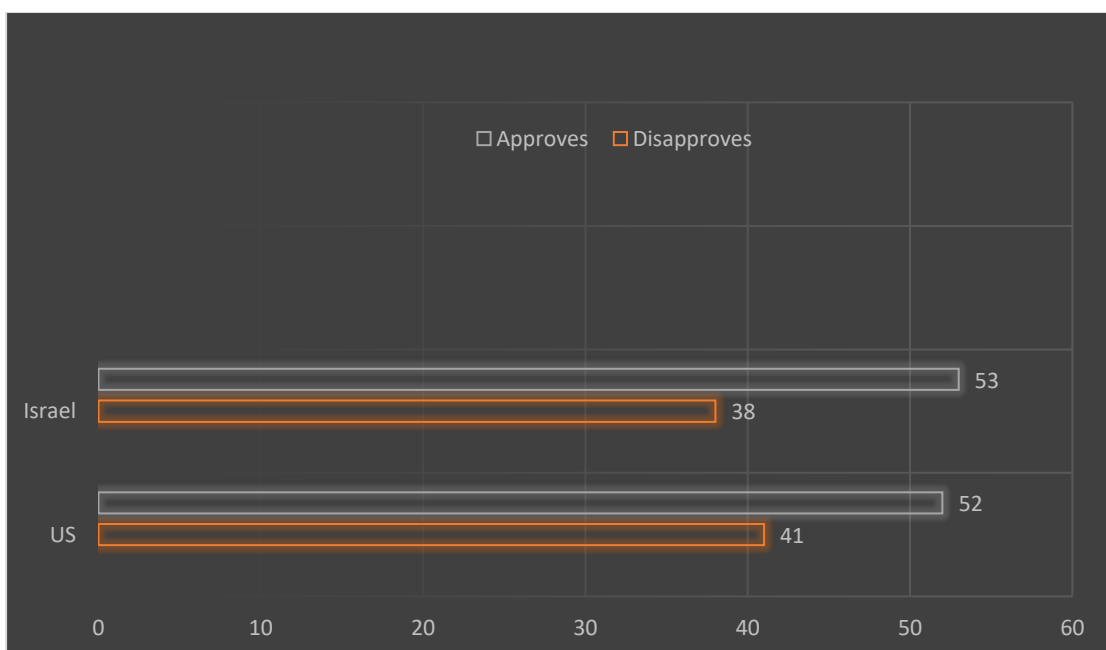
The year 2010 was crucial for armed drone strikes as it was able to kill the teacher of Suicide bombers Qari Hussein himself in the armed drone strike. Many Pakistanis quietly celebrated the death of a man who had killed so many of their people with his suicide bombers. The proponents of armed drones opine so far armed drones has killed fewer innocent non-combatants, as a percentage of total fatalities, in comparison to any

other military weapon. The traditional weapons of war-bombs, shells, mines, mortars collateral damage to people and property than armed drones, whose accuracy and technical precision mostly limit casualties to combatants and intended targets. Although estimates vary because of the secretive nature of the program, it is estimated that 174 to 1,047 civilians have been killed in Pakistan, Yemen, and Somalia since the United States began conducting armed drone strikes abroad following the Sep. 11, 2001 attacks, roughly 8-17% of all deaths from US armed drones (The Bureau of Investigative Journalism, 2013). In comparison, in World War II, civilian deaths, as a percentage of total war fatalities, are estimated at 40% to 67%. In the Korean, Vietnam, and Balkan Wars, the percentages are approximately 70%, 31%, and 45% respectively (Singh, 2013). Moreover, armed drones' strikes are cheaper than engaging in the ground or manned aerial combat. With approximately \$5 billion allocated for armed drones in the 2012 Department of Defense budget, America's entire armed drone program constitutes only about 1% of the entire annual military budget. In comparison, the military's F-35 Joint Strike Fighter program alone cost the United States \$9.7 billion in the fiscal year 2012. The US manned military attack aircraft cost anywhere from \$18,000 to \$169,000 per hour to operate-six to 42 times more than attack armed drones (Department of Defense , 2013).

Al Qaeda spent roughly half a million dollars to plan and execute the attacks on the United States on Sep. 11, 2001. In response, the United States spent roughly \$2.2 trillion in funding manned air and ground wars in Afghanistan and Iraq and on homeland security costs in the following decade-over \$4 million for every dollar al Qaeda spent. When the CIA commenced a lull in armed drone strikes in 2011, a group of Pakistanis launched an online petition calling for the Americans to restart their campaign in order to save the lives of thousands (Williams, 2013). Many locals believe armed drone

strikes help countries fight terrorist threats to their own domestic peace and stability, including al Qaeda in the Maghreb in Algeria and Mali, al Qaeda in the Arabian Peninsula in Yemen, al Shabaab in Somalia, and al Qaeda and the Taliban in Pakistan (Williams, 2013). Yemen's President, Abdu Rabbu Mansour Hadi, has openly praised armed drone strikes in his country, stating that the electronic brain's precision is unmatched by the human brain (Shane, 2012). In a 2008 State Department cable made public by WikiLeaks, Pakistani Chief of Army Staff General Ashfaq Kayani asked US officials for more armed drone strikes, and in April 2013 former Pakistani president Pervez Musharraf acknowledged to CNN that his government had secretly signed off on US armed drone strikes (Botelho, 2013). In Pakistan, where the vast majority of armed drone strikes are carried out, armed drones have contributed to a major decrease in violence. The 41 suicide attacks in Pakistan in 2011 were down from 49 in 2010 and a record high of 87 in 2009, which coincided with an over ten-fold increase in the number of armed drone strikes (Williams, 2013). The figure below reflects how the post-heroic warfare has changed the perception of Israeli and American citizens.

Figure 2.1: Opinion of Israeli and American Citizens on Armed Drone Strikes



Source: Spring 2014 Global Attitudes Survey, Q63, Pew Research Center.

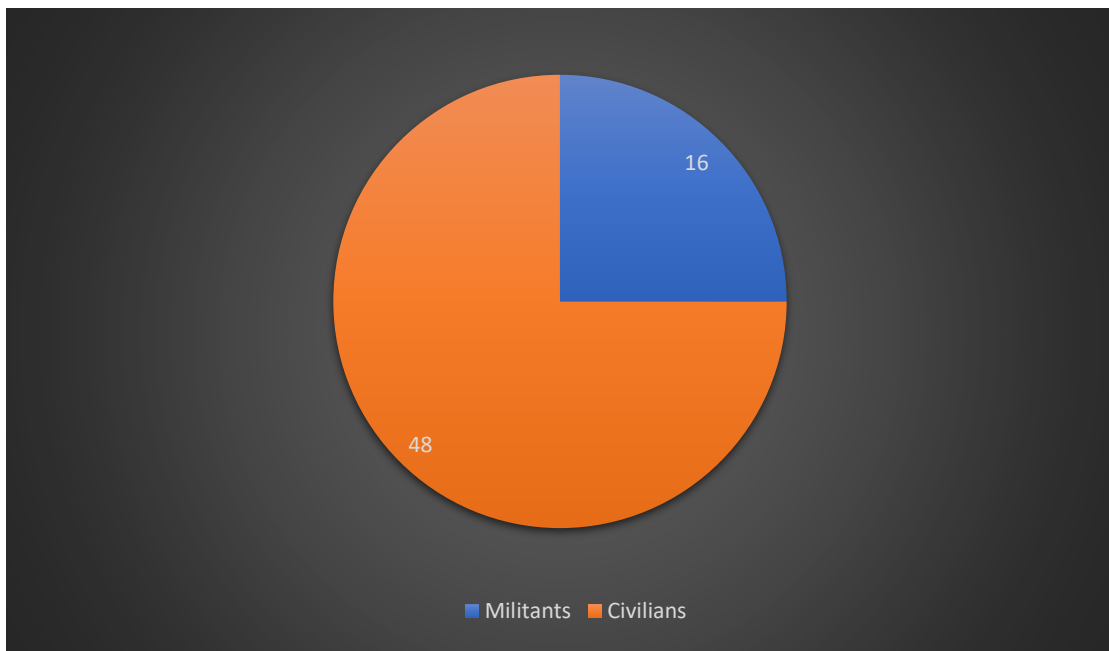
The Argument Against Use of Armed Drones

The majority of Pakistanis seem to agree that the distrusted American is carrying out a campaign of extrajudicial execution of their countrymen in a unilateral hunt for anti-American terrorists. The prevalent Pakistani belief that the majority of those who are being executed by armed drones are civilians only deepens the distrust of America. Instead of tactical gains or strategic advantage, the daily slaughter of some militants, heavy collateral damage of civilian lives, homes, and property will leave long-lasting scars, which will never heal (Khan, 2009). A 2010 Pew opinion poll in Pakistan found that there is little support for US armed drone strikes against extremist leaders those who are aware of these attacks generally say they are not necessary, and overwhelmingly they believe the strikes kill too many civilians. Especially Pew report stated, nearly all (93%) of those who are familiar with the strikes say they are a bad thing. Most Pakistanis (56%) who have heard about the armed drones' attacks say they are not necessary to defend Pakistanis from extremist groups, while one-in-three (32%) believe they are necessary. Nine-in-ten think these attacks kill too many innocent people (Pew Research Centre, 2010). With the Pakistani media banging a steady drumbeat of anti-Americanism, Americans have little power to change this perception. The three separate US studies demonstrate that the armed drones kill only a small percentage of civilians in their strikes have not altered the Pakistanis perceptions that the CIA brutally killing large numbers of civilians in their country.

America is clearly losing the war of perceptions and with it, the war for the heart and minds of millions of Pakistanis, and the armed drones' strikes don't help. General Stanley McChrystal, former leader of the US military in Afghanistan, says that the resentment created by American use of armed drone strikes is much greater than the average American appreciates. They are hated on a visceral level, even by people

who've never seen one or seen the effects of one (Alexander, 2013). 76% of residents in the Federally Administered Tribal Areas (FATA) of northwestern Pakistan (96% of armed drone strikes in the country are carried out) oppose American armed drone strikes. 16% think these strikes accurately target militants and 48% think they largely kill civilians.

Figure 2.2: Opinion of FATA Citizens on casualties on Armed Drone strikes



Source: theguardian.com

Only 17% of Pakistanis back American armed drone strikes against leaders of extremist groups, even if they are conducted in conjunction with the Pakistani government. On three separate occasions, Pakistan's Parliament has voted to condemn the attacks and end the country's cooperation with the CIA, and leaders in the FATA voted on Nov. 4, 2013, to block NATO supply lines unless the United States stops its armed drone strikes. On Dec. 16, 2013, Yemen's parliament passed a motion calling for the United States to end its armed drone program in the country after a wedding convoy of 11 to 15 people were killed by a US armed drone strike (Kohn, 2015).

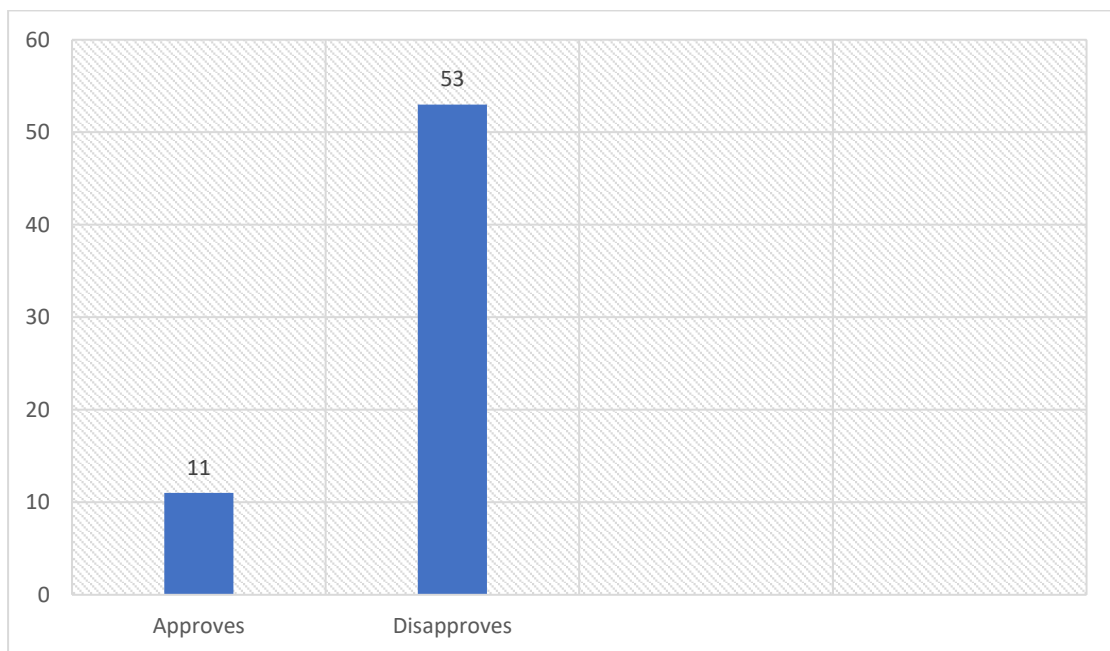
In the larger sense, this failure in the war of perceptions undermines not just Americans' image but also the image of the Pakistani government, which is tied to it. The revelation

that CIA armed drones were being secretly flown from the Pakistani airbase at Shamsi in southeastern Pakistan, with the obvious compliance of Pakistani authorities, seriously undermined the government's credibility with its own people. Many Pakistanis felt that the government, which had issued many public criticisms of the armed drone strikes in the past, was being duplicitous. Those, powerful figures in Pakistan see the strikes as undermining the country's fragile civilian government and creating problems with the tribesmen who are caught between the armed drones and the Taliban. The undermining of the already unstable Pakistani government has grave strategic implications. Criticism of the armed drones is not limited to the Pakistani government. There has been no person more critical of the strategic setbacks caused by the armed drone campaign than retired admiral Denis C. Blair, former director of National intelligence. Since being forced out of his post in 2010 for voicing his criticism of the strikes, Blair has called for the CIA to hand over the armed drone campaign to the military. He went so far as to suggest that US pull back on unilateral actions, except in extraordinary circumstances (Gerstein, 2011). He further said we're alienating the countries concerned, because we're treating countries just as places where we go to attacks groups that threatened us (Blair, 2011).

Most of the time's armed drone Strikes are often carried out without permission and against the objection of the target countries. Pakistan's foreign ministry on June 4, 2012, called armed drone strikes illegal and said they violated the country's sovereignty (Nauman, 2012). On October 22, 2013, Pakistani Prime Minister Nawaz Sharif said that the use of armed drones is not only a continued violation of our territorial integrity but also detrimental to our resolve at efforts in eliminating terrorism from our country, I would, therefore, stress the need for an end to armed drone attacks (The Economic Times, 2013). The United Nations' Human Rights Chief, Special Rapporteur on

counter-terrorism and human rights, and Special Rapporteur on extrajudicial, summary, or arbitrary executions have all called US armed drone strikes a violation of sovereignty, and have pressed for investigations into the legality of the attacks. In July 18, 2013, country survey by Pew Research, only six countries approved of US armed drone strikes in Pakistan, Yemen, and Somalia. Moreover, 53% Pakistanis has disapproved US armed drone strikes (PRC, 2013).

Figure 2.3: Opinion of Pakistani Citizens on Armed Drone Strikes



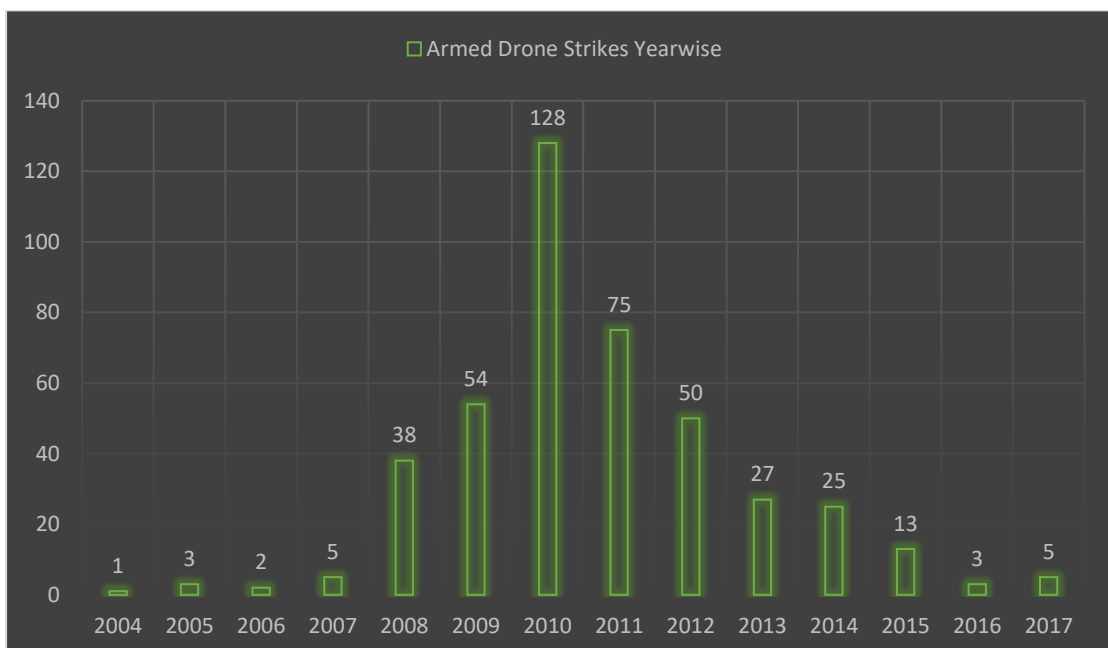
Source: Pew Research Center

Many people who oppose armed drone strikes also consider them Whac-a-mole-type short-term solutions that cannot solve the problem of terrorism in the long run. Wars cannot be won from the air; they have to be fought on the ground. This means sooner or later the United States will have to rely on the countries to solve the terrorist sanctuary problems across the globe.

People who see their loved ones injured or killed in armed drone attacks become motivated to join actions against the United States. According to author Jeremy Scahill, the vast majority of militants operating in Yemen today are people who are aggrieved by attacks on their homes that motivated them to go out and fight. Support for al Qaeda

in Yemen is indigenously spreading and merging with the mounting rage of powerful tribes at US counterterrorism policy as the armed drone strikes have recruited thousands (Lafranchi, 2013). The number of Al Qaeda in the Arabian Peninsula (AQAP) core members grew from 300 in 2009 (when US armed drone strikes resumed after a seven-year hiatus) to 700 in 2012, resulting in an exponential increase in the number of terrorist attacks in the region. Both the Underwear Bomber, who tried to blow up an American airliner in 2009, and the Times Square Bomber, who tried to set off a car bomb in New York City in 2010, cited armed drone strikes in Pakistan, Yemen, and Somalia as motivators for the plots (Raghavan, 2012). The US has been using armed drones for targeted killings in Pakistan since June 2004, post 2001 terrorist attack. The strikes have been targeting al Qaeda and its allies, including the Afghan Taliban, as well as the Pakistan Taliban. Many civilians are also killed in the strikes, it remains unclear whether or not they belong to any armed group, let alone their status within that group. The figure below shows the armed drone strikes in Pakistan between 2004-2017.

Figure 2.4: No. of US armed drone strikes in Pakistan: 2004-2017



Source: The Bureau of Investigative Journalism (TBIJ.com)

International Humanitarian Law

IHL or the law of war is perhaps at the vanishing point of International law. This law comes into force once the war begins and fighting has started. However, some critics argue war cannot be regulated by law as they argue war begins for survival and legal value during the war are always abandoned. The modern law of war or which is frequently today known as the international humanitarian law has been evolved through a series of treaties, the most important of which are the Hague conventions of 1899 and their successor of 1907, the four Geneva conventions of 1949, and two 1977 additional protocols to those conventions. One of the most binding conventions to every state of the world is 1949 conventions but important major military powers like the United States are not parties to the 1977 first Additional protocol or the recent treaties such as the 1998 Ottawa Convention banning anti-personnel land mines (Greenhood, 2003).

In recent years, the law of war has been influenced by the law of human rights. The law of war, however, is both more specialized and more detailed and in many areas of international human rights, law adds nothing to it. The law of war requires a degree of reciprocity in that a law of war treaty applies only between states party to it. However, one of the fundamental principles of the law of war is that it applies equally to all the parties to an armed conflict, irrespective of who is the aggressor.

Applicability of the International Humanitarian Law or law of war

IHL involves a body of legal standards that define the acceptable use of force in connection with armed conflicts or wars as between nation-states or between a nation-state and a non-state actor group such as the Islamic State (ISIS) or al Qaeda. Where a nation is using military force according to IHL and in connection with an armed conflict, a corresponding set of IHL standards applies in determining what sorts of forceful actions can lawfully be undertaken against enemy combatants.

The threshold determination for the applicability of IHL involves establishing that an armed conflict exists. According to several commentators (and going back to the original authority established under the Geneva Conventions), the presence of an armed conflict is supposed to be based on objective criteria and verifiable facts. In practice, the threshold for making this determination seems less than fully clear, but involves violence reaching a minimum level of intensity and duration (meaning, more than isolated attacks), and in the case of conflicts involving non-state actors, also touches on whether those actors are sufficiently identifiable and organized. Thus, prolonged military action between two nation-states that follows from openly declared hostilities would meet the classic criterion for an armed conflict. An isolated terrorist attack unconnected to any organized political group would probably not. Less analytically clear are in-between situations that involve non-state actors who engage in more than a single, isolated attack. Another question is exactly how organized and tightly controlled such groups need to be, and how committed, geographically focused, and frequent their attacks, for an armed conflict to exist and for IHL to apply. Put another way, the semantics of whether there is an armed conflict, and what the scope of that conflict is may involve considerable judgment in these cases. It is also important to acknowledge that there is ongoing debate regarding whether international law allows a state to assert the same belligerent rights against a non-state actor as would be permissible against an opposing sovereign state (Alston, 2010). Implicitly, the determination of armed conflict is also defined by the direct participation of one or more state actors. Thus, the fact that two sovereign entities (or alternately, a state and a non-state actor) are involved in armed conflict does not imply that another, third-party state is automatically a party to the same armed conflict, simply by virtue of its desire to intervene. This issue might come up in a hypothetical armed drone strike against a terrorist target, where the

terrorists in question are in an armed conflict with someone, but not with the state that is considering whether to undertake the armed drone strike. Situations like this may involve a complex review process, in which questions about the applicability of self-defense, sovereign consent, and armed conflict are all simultaneously in play, and in which the answer to any one of these questions is likely to depend simultaneously on answers to the others.

There is the question of whether International humanitarian law applies to United Nations military operations. The United Nations acts on the behest of the International Community and hence United Nations is not a party to any of the treaties on the law of war. If the IHL does not apply to UN military operations than the humanitarian protection it offers is not available and the consequences of that may be horrendous. The United Nations recently has issued a directive in this matter which says UN peacekeeping forces to observe the basic principle of IHL but still it is unclear to what extent the United Nations force in such cases is to be treated as a party to hostilities and whether the full body of IHL is applicable to it (Greenhood, 2003).

There is also a question of fighting between state and terrorist organizations. Since the terrorist attacks of 11 September 2001, the United States government has taken the position that it has been engaged for some years in international armed conflict with Al-Qaeda terrorist movement. The United States has accordingly maintained that the law applies to its military operations against Al-Qaeda and the captured members of Al-Qaeda can be held for the duration of the conflicts as combatants. This approach appears to confuse a number of different issues.

Compatibility between Armed Drones and IHL

***Jus in Bello* and IHL**

Jus in Bello governs the conduct of groups engaged in armed conflict. IHL is synonymous with *jus in bello*; it seeks to reduce the trauma of armed conflicts, in particular by protecting and supporting as much as possible all victims of armed conflict (Kierulf, 2017). IHL extends to belligerents' parties, regardless of actual reasons for confrontation or the justness of the causes for which they are fighting. If it were otherwise, implementing the law would be impossible, since every party would claim to be a victim of aggression. Moreover, IHL is intended to protect victims of armed conflicts regardless of party affiliation. The rules of just conduct within war fall under the two broad principles of discrimination and proportionality. The principle of discrimination concerns who are legitimate targets in war, whilst the principle of proportionality concerns how much force is morally appropriate (Kierulf, 2017).

IHL Basic Principles

IHL or the Law of War governs the actions of states or other parties directly involved in warfare during IAC or NIAC. IHL's entire body is based on the principles of distinction and proportionality, by prohibiting indiscriminate attacks, a precaution in attacks and the protection of protected persons. The International Committee of the Red Cross (ICRC) describes IHL in the following way: International humanitarian law is a set of rules which seek, for humanitarian reasons, to limit the effects of armed conflict. It protects persons who are no longer participating in the hostilities and restricts the means and methods of warfare. International humanitarian law applies to armed conflicts. It does not regulate whether or not a State may actually use force; this is governed by an important, but distinct, part of international law set out in the United Nations Charter, [Humanitarian law] does not cover internal tensions or disturbances

such as isolated acts of violence. The law applies only once a conflict has begun, and then equally to all sides regardless of who started the fighting. The major principles of IHL are distinction, proportionality, unnecessary suffering and military necessity.

Principle of distinction

‘Distinction’ is one of the most important principles of IHL. It requires combatants to direct their attack solely at other combatants and military targets and to protect civilians and civilian property. Under the principle of distinction, indiscriminate strikes are forbidden: i) if they are not striking a military target, ii) if they are using a method or means of warfare whose effects cannot be restricted or directed as per intended. The principle of distinction also necessitates that defenders must distinguish themselves from civilians and refrain from placing military personnel or material near civilian objects. It is heard from many quarters that whilst ‘people were in the gardens to water their plantings, the plane without a pilot targeted them and they were killed.’ Most of the loud cries about armed drone program concern the question of who is being targeted. The principle of distinction implies that the conflicting parties, whether NIAC or IAC, ‘must always distinguish between civilians and ground troops’ (ICRC, 2019). While evaluating armed drones’ technological features, including their tracking and high-end precision capability, it is easy to conclude that armed drones are not only perfectly capable of adhering to the distinction rule, but are also capable of strengthening adherence to that principle. Nevertheless, the fact that they are expected to adhere to this principle does not necessarily mean that they cannot be used indiscriminately and therefore in a way that is inconsistent with the idea of distinction. Several scholars, which include former Special Rapporteur on Extrajudicial Philip Alston, discussed issues with the designation of a weapon as inherently discriminatory or indiscriminate. In fact, it is possible to use all weapons in a way that is indiscriminate. For example,

armed drones may carry payloads such as nuclear missiles or chemical agents that are likely to have indiscriminate impact, which are highly accurate targeting devices. Similarly, as the International Court of Justice has previously observed, an atomic bomb, a WMD that is commonly prohibited primarily because of its indiscriminate existence, could be used in a way that would not have any impact on innocent people. Therefore, it is difficult, if not impossible, to say that a weapon is indiscriminate in nature. Weapons that have been banned due to their discriminatory nature so far have been banned primarily because their use is mostly indiscriminate rather than because they are unable to be indiscriminate. Therefore, what matters here is not whether armed drones are inherently discriminatory or indiscriminate, but whether armed drones are used mainly in a discriminatory manner.

Many scholars have criticized US armed drone strikes because they resulted in civilians being killed. Nearly 560 of the nearly 5,300 people killed in US armed drone strikes were civilians, according to some reports. Although this number may seem startling to some, in fact it does not endorse, on its own, a claim that armed drones or their prevalent use are indiscriminate. It is important to note in this context that the killing of civilians is not forbidden by IHL. Rather it forbids civilian targeting. An armed drone attack attacking combatants inadvertently resulting in civilian collateral damage would therefore not be unlawful only because it caused civilian deaths. Nevertheless, according to Article 51(5) AP I, which forbids indiscriminate attacks, an attack that could be expected to result in accidental loss of innocent civilian people, injury to innocent people, permanent damage to public property or a combination of all that would be disproportionate in comparison to the clear and direct expected military benefit (ICRC, 2019). In order to determine if any of the attacks that resulted to civilian casualties were indiscriminate, it is therefore important to evaluate whether the attack

was intended to result in collateral damage and, if so, whether the damage was disproportionate in comparison to the potential military advantage. Even though a number of such strikes may be found to be unlawful if examined against the above criteria, this does not necessarily support the argument that the weapon itself is or should be contrary to the law. Although armed drones are worthy of being indiscriminate, as outlined above, and many armed drone attacks have resulted in a civilian death toll, collateral damage has more likely resulted from a targeting mistake than by the nature of the armed drone itself. While it is almost impossible to ascertain if an armed drone strike is discriminatory without analyzing it in relation to the potential military advantage, armed drones appear perfectly capable of adhering to the principle of distinction as comparison to the use of other similar weapons such as jet fighters and long-range missiles, which are deemed discriminatory and authorized under IHL.

Principle of Proportionality

The principle of proportionality is related to the principle of distinction. It prescribes that warring parties in armed conflict are not inflicted on innocent civilians that is excess in connection to the military superiority they seek with any hostile action. Once the appropriate target has been established, IHL allows the armed drone attack to be carried out in accordance with the concept of proportionality by applying the principle of distinction. Unlike the principle of distinction, which determines who can be a legitimate goal, the principle of proportionality concerns how the attack should be carried out.

The principle of proportionality is closely linked to the principle of distinction to a great extent because it is based on the premise that an armed attack must be carried out against terrorist targets but recognizes that some civilian casualties or loss of civilian property can only be justified if the strike is not excessive to the anticipated benefit. In sum, an

effort is being made to limit the damage to the people and civilian property as much as possible, matching the embedded principles of military necessity with the principles of humanity. Compliance with such a principle requires the armed forces to make a robust pre-attack assessment based on all available information, to consider, on the one hand, the probable effectiveness of the defense attacks and, on the other, the possible effect on protected groups. Under Article 51 of AP-I, the principle of proportionality is codified and then reiterated in Article 57 (ICRC, 2019). Any military strike that can cause an accidental loss of civilian life, harm to civilians, and damage to civilian property that is disproportionate in comparison to the expected real and direct military benefit is to be forbidden as per the principle.

IHL forbids the use of certain arms and ammunition not only because they are unable to discriminate, but also, they are likely to cause needless suffering or unnecessary injuries. (ICRC, 2019). The above prohibition is enshrined in Article 23(e) of the Annex to a Hague Convention IV of 1907 and is based on the principle that the ultimate objective of each participant in a conflict would be to make the enemy *hors de combat* in order to gain a military superiority and not simply to eliminate him or her or cause irreversible damage (ICRC, 2019).

This is not necessary to determine respect for the principle of proportionality exclusively by counting the number of casualties. In reality, the assault on a high-level target would warrant a greater amount of unintended civilian deaths due to its high value in terms of tactical advantage. On the contrast, a strike on a low-level individual in a public place, with a high risk of harming citizens, is to be viewed as unreasonable and therefore illegitimate. The military superiority that emerged from the strike, and the need for humanitarian aid that the attack did not cause deaths and/or harm to a large

extent in comparison to the anticipated clear and direct military gain. It's very difficult to achieve that balance.

The factual qualities of armed drones, their accuracy (both in context and in targeting) provide improved mechanisms for compliance with IHL (Lewis, 2012; Schmitt, 2011). The evolution of weaponry development, such as the emergence of armed drones, could provide States with improved methods for IHL compliance. For example, armed drones have specialized, focused targeting mechanisms, which sufficiently meets the capable of discriminate attacks criteria (Schmitt, 2011). However, that is not to say that States fulfill their IHL obligations and use armed drones purely within lawful activities, but armed drone actions resulting in violations of IHL are more often deliberate actions. Prohibitions governing indiscriminate attacks do not, however, mean that any attacks which cause harm to civilians are forbidden, but rather indiscriminate attacks that fail to distinguish between combatants and civilians would be disallowed (Gill & Fleck, 2010). This distinction theoretically could be complied with and still result in incidental, but legal harm to civilians if the attack was not carried out directly against the civilians but the harm occurred incidentally under proportionality and necessity criteria (Gill & Fleck, 2010). This again demonstrates the potential effectiveness of utilizing armed drone technology whereby the accuracy in targeting combined with the play-by-play data sent to the pilot allows for firing the missiles only when the window of opportunity meets IHL criteria. Also helpful is to demonstrate that those who use armed drones as in those responsible for flying them and firing the weaponry from remote locations, receive training and are informed of IHL laws something that the media and academia either disregards or perpetuates ignorance of. This is partly due to the secrecy or transparency deficit with State defensive units, intelligence, military capabilities, and general extra-territorial defensive operations fall under the continued

dogmatic shield of State sovereignty (Schmitt, 2011). What attention is brought to the issue falls more often under unfortunate failures or mistakes than of a balanced perspective of successes this again relates to the lack of transparency, where defensive departments are reluctant to share information regarding their operations, leaving them open to criticism by the international community. IHL is addressed to States, requiring the belligerent parties involved to inform and enforce (and if need be, to punish) compliance with established rules of war. However, war crimes are perpetrated by individuals, whether under criminal liability as an accessory to the crime, as a commander, or as a primary perpetrator. Legally, pilots of armed drones, whether via civilian intelligence or contractors, are considered to have unprivileged participant status for the duration of their targeted armed drone killing activities (Lewis, 2012; Alston, 2010; Vogel, 2011). This is significant as it makes them lawful targets for the temporal scope of their participation. (Alston, 2010).

Unnecessary Suffering

The principle of unnecessary suffering prohibits the use of methods or means warfare which may be expected to cause unnecessary suffering or superfluous injury (ICRC, 1907; ICRC, 1977). This principle stipulates that all humans have the capacity and ability to show respect and even care for their enemies. The notion of unnecessary suffering is the fact that separates humans from animals. Therefore, all people must be treated humanely and without discrimination based on sex, nationality, race, religion, or politic beliefs. The central IHL concept of unnecessary suffering, a concept developed to minimize damage to innocent civilians when combatants are being killed, is enshrined in Additional Protocol 1, Article 35(2) 'The use of weapons, projectiles, materials and fighting methods of a nature to inflict superfluous injury or unnecessary suffering is forbidden'(Kaag & Kreps, 2014). When a military objective has been

accomplished, the infliction of any further pain is needless (Blank, 2012). A weapon which is used in the armed conflict cannot be banned on the basis of unnecessary injury or unneeded suffering just because it results into unbearable pain or even disability (Solis, 2010). There's nothing special about the arms and ammunition borne by armed drones and is used by remotely controlling pilots. A missile fired from an armed drone isn't any different than any widely used weapon, such as a bullet fired from a gun of a soldier or a missile launched from an aircraft or gunship (Alston, 2010). To be consistent with the principle of unnecessary suffering to a great extent depends on the type of armament being used and how much suffering it can inflict. Armaments can be selected keeping in mind the criteria to fulfill this principle; but, compliance with the IHL to great extent depended on the characteristics of the weapon being used and the ability of person who use the armament for a specific mission (Sehrawat, 2017). It is also very hard and rigorous process to ascertain what comprises 'unnecessary suffering,' in the absence of universally accepted standard (Sehrawat, 2017).

Military Necessity

The principle of 'Military necessity' is solely based on the concept that armed forces may only be used against legitimate military targets (Toscano, 2015). Military necessity is an underlying principle of IHL, and is reflected in Articles 52(2) and 54(5) of Additional Protocol I and Article 17 of Additional Protocol II. It is a complex principle and the extent of its practical relevance is the source of academic debate. The principle asserts that measures that are necessary to accomplish a legitimate military purpose are permitted as long as they are not otherwise prohibited by IHL. (Melzer, 2010)

In the words of Vogel armed drone strike is militarily necessary because it offers a definite military advantage by killing terrorist leaders therefore neutralizing terrorist

attacks. However, in a closer analysis it appears that the armed drone strikes and its effects reveals that armed drone strikes does not offer the required 'definite' military advantage (Ryan, 2010).

On this Background of imprecise nature of armed drone strikes resulting death of innocent civilians as a result creating a desire of revenge in the mind of civilians, and as it helps into getting more recruits in the terrorist groups, numerous data shows steady rise in the new recruits in the terrorist groups due to increased armed drone strikes. Therefore, it can be argued that use of armed drones targeting terrorist does not necessarily offer a reasonable military advantage that can justify the killings of high number of innocent civilians (Jones & Libicki, 2008).

In the history of armed warfare once the cross-bow arrows were banned not because they were ineffective but because they cause unnecessary suffering, it's evident even Pope Urban II in 1057 had plead for complete ban over use of cross-brow in war. Assuming without agreeing that the targeting of the terrorist leaders amongst civilians is necessary, IHL demands that the countries to take more precaution before striking.

Justification for the Use of Armed Drones in Modern Warfare

Armed drone strikes have grown increasingly controversial over the last few years especially in the 21st century. This is not just because there is anything inherently sinister about armed drones as such; in fact, armed drones merely represent the latest version of technological developments which enables the delivery of force from a faraway place. Armed drones are boon for political decision-makers, and have obvious advantages: they are quite cheaper to produce than manned aircraft with comparable payloads; their use creates no short-term risk to civilian lives; and, relative to other weapons-delivery systems, and most importantly their enhanced surveillance capabilities gives low margin for killing anyone other than the intended target.

Aftermath of the 9/11 attack in the United States saw the dramatic rise of armed drones' technologies as the United States, struggling to respond to the threat of transnational terrorism after 9/11, began to perceive an increased need for low-cost, low-risk cross-border uses of force. Terrorist threats can come from anywhere, but it is impractical to use conventional military force everywhere. In certain situations, armed drone strikes appear to offer a cheaper, easier, and safer means of fighting terrorists. Armed Drone strikes remained a rarity until 2008, however, when the Bush administration launched thirty-six strikes in Pakistan. Beginning in 2008, the United States began to make more frequent use of strikes from armed drones. Most controversially, the United States has greatly increased its reliance on armed drone strikes outside of traditional, territorially-bounded battlegrounds. Since the inception of armed drones and its wide range use in different states' territories particularly outside Afghanistan such as in Pakistan, Yemen, Somalia and elsewhere, there have been a curious debate in the international law community as to the legal justification of the use of armed drones in various operations. American justification for armed drone strikes was largely rooted in the notion of self-defense. On September 12, 2001, the UN Security Council passed Resolution 1368 which condemned the al Qaeda attacks of the previous day, recognized the inherent right to self-defense, person or group, and expressed its readiness to take all necessary steps to respond to the terrorist attacks of 11 September 2001, and to combat all forms of terrorism (Byers, 2002). This position was reflected when AUMF was passed in the 2001 by US congress, giving the President the power to use all necessary and appropriate force to target al Qaeda and any terrorists associated with the organization. Further, President George W. Bush defined al Qaeda and any associated non-state forces as unlawful combatants, denying them full protection under the Geneva Convention.

Philip Alston, the UN Special Rapporteur on extrajudicial, summary or arbitrary executions, has politely asked the US to clarify how they justify using armed drones to target and kill civilians within international law. He said that the US government must lay down the criteria for actions to execute rather than apprehend people and guarantee that they comply with international law in advance of armed drone killings and make public the number of civilians killed collaterally as a result of armed drone attacks and the measures in place to deter these killings (Alston, 2010). After encouraging initiatives by the UN and other relevant organizations for the Countries like the UK, US and others to deliver a legal justification for its armed drone strikes. In response to this Harold Koh Legal Advisor to the US State Department spoke at the March 2010 Annual Meeting of the American Society for International Law and used the opportunity to present the considered view of the Obama Administration in respect to US targeted operations, particularly those carried out with armed drones.

The highlights of the speech can be summarized as follows:

‘The Obama administration is committed by word and deed to performing itself in compliance with all applicable law in all of our activities including the use of force, including those involved in the international conflict with non-state actors like the Taliban, al-Qaeda, and allied forces. As far as targeting is concerned, which has been extensively reported on in the media and international legal circles, there are clearly limitations on what I can say publicly. Whatever I can say is that it is this administration’s considered opinion and it was definitely my experience as a legal adviser during my tenure that US targeting activities, including offensive actions with the use of armed drones, conform with all relevant laws, including war laws. Second, some have questioned the very use of sophisticated weapons technologies for lethal operations, such as armed drones. The rules governing the targeting, however, do not

affect the types of weapon-system being used, and the IHL do not forbid the use of militarily sophisticated weapon systems in armed conflicts, such as armed drone or guided bomb unit, as long as they are used in compliance with existing laws of war. Nonetheless, the use of such advanced technologies will guarantee that the best intelligence for conducting operations is available and that civilian casualties are reduced in carrying out such operations. Third, some have contended that use of lethal force against specific individuals does not provide a proper process and therefore constitutes unlawful extrajudicial killing. Nevertheless, a state participating in an armed conflict or lawful self-defense is not necessary to provide legal process for targets before the state can use lethal force. Our targeting policies and activities are extremely robust and legal. Moreover, modern sophisticated military technologies have helped to make our strikes even more precise and accurate. Throughout the planning and execution of lethal operations they are rigorously applied to ensure that such operations are carried out in compliance with all applicable law. But under domestic law, whether operating in self-defense or during an armed conflict, the use of legal weapons systems, consistent with the existing laws of war, is not illegal, and therefore does not entail crime. In summary, let me repeat- as in the field of detention this Administration is committed to making sure that the targeting activities, I have mentioned are legitimate' (Crook, 2010).

In the statement Koh states, the detailed accounts of justification of the use of armed drones by the US across the world, especially in Pakistan, Afghanistan and the Middle East.

The Obama administration relied on the logic of self-defense to justify its counterterrorism campaigns against al Qaeda, including far more extensive use of armed drone strikes. President Obama stated that the use of armed drone was part and

parcel of our overall authority when it comes to battling al Qaeda (Akins, 2017). The Department of Justice wrote a white paper, released on February 2013, which provided a legal framework for lawfully killing terrorists abroad, including US citizens. They included:

1) An authorized, high-level US government officer has assessed that the targeted individual poses an immediate threat of violent assault on the US; (2) capture becomes unfeasible and the US seeks to track whether capturing is feasible; (3) action is performed in a manner consistent with the basic principles laws of war governing the use of force (Kaye, 2013).

This justification still presented the United States with the challenge of operating a covert counterterrorism campaign that operated in the sovereign territory of other states. In November 2001, the President of Yemen, Ali Abdullah Saleh, traveled to Washington, DC for meetings with President Bush, Vice President Dick Cheney, FBI Director Robert Mueller, and CIA Director George Tenet. Given al Qaeda's known presence in the Yemeni hinterland, it appeared on early lists of potential enemies following 9/11. During the visit, Saleh, fearing his country could go the way of Afghanistan, declared Yemen a principal partner in the coalition against terrorism. In negotiations concerning security cooperation, Saleh was promised nearly \$400 million in aid programs, additional funding from the IMF and World Bank, and support for Yemen's military and intelligence agencies. Saleh, in turn, approved the deployment of US troops and CIA operatives to provide training for Yemeni Special Forces and gave secret authorization to Tenet to operate armed drones over Yemen's territory (Scahill, 2013).

In the year 2013 President Obama's delivered speech on armed drone warfare which one might think would contain the most cogent explanation of America's position on

the law of armed drone warfare only offered the following nugget in support of its armed drones strike:

‘The acts of the United States are legitimate. Since 9/11 we’ve been targeted. In short period of time, US Congress authorized the use of force overwhelmingly. The US is at war with, the Taliban, al-Qaeda and their allied forces under domestic law and international law. We are at war with a group that, if we didn’t stop them first, would destroy as many Americans as possible right now’ (Kaye, 2013).

Understanding of US justification on the use of armed drones has made more difficult by the fact that administration spokespersons often appear to oscillate between putting forward a law of armed conflict framework and a self-defense framework when justifying armed drone strikes. At times, US officials appear to have suggested that the self-defense framework supplements the armed conflict framework. (Brooks, 2014) In recent months, however, their language has suggested that the United States has shifted entirely from an armed conflict framework to a self-defense framework. In any case, a self-defense framework possesses as many unknowns as an armed conflict framework: it is not entirely known how the United States understands the terms armed attack or imminent, nor it can be understood how the United States evaluates issues of necessity and proportionality. With regard to sovereignty issues, US officials have repeatedly stated that they only use force inside the borders of a sovereign state when that state either consents to the use of force or is unwilling and unable to take appropriate action to address the threat itself (Brooks, 2014). It is not known, how the United States evaluates issues of consent in situations in which consent is ambiguous. It is also not known precisely what criteria the United States uses to determine whether a state is unwilling or unable to take appropriate action.

The Obama administration has offered a number of arguments supporting its broad definition of when IHL principles apply to targeted killing using armed drones' (Davis, McNerney, & Gr, 2016). One set of arguments uses their broad definition of al Qaeda and associated groups under the 2001 AUMF and their broad definition of self-defense and existence of imminent threat to view areas where al Qaeda and its associated groups are operating as the theater of armed conflict, such that IHL therefore applies. Another set of arguments begins with the view that the 2001 AUMF does not provide legal justification as to what is an area of armed conflict for purposes of international law; thus, the argument can be made that where there is no government (in areas of anarchy and violence), wartime targeting rules apply. In other words, policing rules of engagement cannot apply in an area of anarchy, where there is no conventional government authority (Davis, McNerney, & Gr, 2016).

Conclusion

It has been more than seventeen years since the first case of use of armed drone was reported which took place in Yemen on 3rd November 2002, which is widely believed to be outside the traditional concept of armed conflict. Since, then thousands of civilians have been killed over the period of nearly two decades. The most of the cases of civilian deaths are difficult to calculate in the absence of clarity about the use of armed drones, which hinders assessing the full extent of the civilian effect of armed drones and thus adds to the lack of accountability.

The use of armed drones to kill suspected terrorists is controversial, but so long as a human being decides whether to fire the missile, it is not a radical shift in how humanity wages war. Of even greater concern is the prospect of fully autonomous armed drones making targeting decisions based on a series of programmed vectors, potentially without any human control (Malinowski, 2012).

Chapter 3

Moral and Ethical Issues Related to Armed Drones

Introduction

The military use of armed drones has grown rapidly over the last few years. There has been steady rise in the use of armed drones by the countries like United States, Israel and United Kingdom. Controlled via satellite communication, these armed drones are directed to launch missiles and bombs, often at distances of several thousand miles.

In 2004, John Lockwood set up an internet site called live-shot.com. The idea was at once simple and innovative. By subscribing online for a few dollars, the internet surfer could become a virtual hunter. Thanks to a camera fixed to a mobile forearm, itself connected to a remote-control device, one could, without stirring from home, shoot live animals let loose for the occasion on a ranch in Texas (Chamayou, 2015).

When it made the news, there was a rush to condemn it citing the ethical problems related to it. There was a massive protest against it from different sections of society. Soon after the wide protest across the country hunting online was forbidden. However, Lockwood intended internet audience shifted to others, no doubt more exciting, online pleasures, and the little venture that had seemed so promising collapsed. The triggers of moral indignation are quite mysterious sometimes. While the virtual hunting of animals was almost universally condemned as scandalous, the armed drone hunting of human beings was at the same moment taking off without any of those same people making any objections (Chamayou, 2015).

While US officials cautioned that the armed drones would be called off if there were a risk of civilian casualties from a strike, the limited assassination campaign that started post 9/11 was broadened into what could be described as an aerial war (Lewis & Vavrichek, 2016).

Just War Theory and Armed Drone

There is a long history of armed conflict, within the armed conflict, armed drone warfare is a relatively new means warfare. Armed conflict has been recurring throughout human history over a different period, and for presumably just as long, people have theorized about war's nature, character, necessity, and alternatives. Leaders involved in war consistently employ arguments demonstrating the justness of their cause making public cases that their impetus for war was reasonable (Fixdal & Smith, 1998). If we look in and out of history of mankind, it shows that war was always part of social reality, though its causes and reasons are profoundly different. Countries have often felt the need for moral justification for their warfare, and the credibility of these arguments has been a strong source of tactical advantage or disadvantage (Gray, 2010). Numerous theories of war and peace have subsequently been constructed, but Just War Theory remains the most enduring one till date.

Just War Theory has shaped how war is conceived and justified, and how war is therefore regulated. Such regulations have been codified in widely-accepted laws of armed conflict. Yet, applying Just War Theory to any type of conflict is not simple. No singular text represents the formation of Just War Theory, nor can it be attributed to any one person, group, or school of thought. Rather, Just War Theory has been developed over centuries and has consequently been subject to the religious and political influences of the times. The JWT can be portrayed as an argument regarding warfare's moral standing as a human activity. There are two key premises behind such

an argument: first, that war is most of the time justifiable, or even ethically acceptable. While thinking about Second World War and the fight against Nazism, the reference is much more apparent. According to his description, when our highest beliefs and mutual life are in imminent risk, Michael Walzer used to call it 'supreme emergency'. The second assumption is that the managing of armed conflict is subject to intense moral criticism and assessment (Walzer, 2005). The theory's rationale is to explore and pursue justice even under the clouds of war. To act in compliance to ethical and moral principles, is a significant component of any armed conflict and other confrontation. The most important issues in war is to act morally, and while this does not unambiguously mean success, the lack of intent and unethical behavior undermines the entire political project behind the warfare (Walzer, 2006). The 'ethics' and 'strategy' are invariably mutually dependent, particularly from the viewpoint of *jus in bello*: how force is applied importantly affects the possibility of overall war success and the in the event of a post-war peace settlement (Enemark, 2014).

The concept of 'just war' is deceptive, implying that at some point of time there has been or may be a dispute in the near future in which one side is ethically perfect, as the supporters of the purest form of wars have sought to do (Johnson, 1981). However, since the seventeenth century, when Francisco's de Victoria protested against religious belief as a just cause of war, the idea of purest form for war has been isolated from the successive explanation of the theory.

Johnson said: 'If there's ever been a just war, in the holiest form of justice, then it must be a reminder that human ethical decisions inevitably contain a tragedy: there is a loss for every gain. All while just war is the terminology in use by tradition, a more precise terminology would be justifiable war, indicating that the ethical policy-making process applied to war must continue as long as the war in question lasts and should be

relative, with evidence of good and evil on both sides of the conflict being admitted' (Johnson, 1981).

Major civilizations and societies have been involved in learning about the justification of the resort to war and the best ways to fight it. This rationale is ascertained by the intuitive or pragmatic sense that perhaps the two ends of the moral spectrum, namely pacifism and realism, are unmanageable and that the proper position is that which falls in the middle of the spectrum somewhere (Hashmi, 2012).

Origins of Just War Theory

JWT is meant to come from a Christian tradition which dates back to Thomas Aquinas and Augustine of Hippo's writings. While these statistics and the associated thinking traditions are highly significant and influential, any JWT sectarian expropriation is historically unbearable. Several pre-Christian philosophers, like Plato, Aristotle, Cicero, Cato the Younger, Seneca, Polybius, and Sallust, to name just a few, differentiated between just and unjust criteria for wartime, and between just and unjust actions in the wartime. The principles of *jus ad bellum* also resonate with religious texts in the tradition of Islamic law. Indeed, they argue that a war must have a legitimate authority, a reasonable hope for success, a right intention and a just cause (Kelsay, 2006).

The genesis of a precisely Christian conception of JWT appeared first in Saint Augustine's thought, in his City of God, which conceived the perfect place as one portrayed by a just order and in peace both within itself and with other societies. Augustine's interpretation of JWT is not merely influenced by his Christianity, but is rather an extension of his Christianity, as his religious views seem to fully inform his views on war.

The Christian tradition's most systematic presentation and one that still woe attention is the one described in the 13th century by St. Thomas Aquinas. Thomas Aquinas succeeded Augustine in the succession of prominent Just War Theory philosophers. His writings on Just War brought an understanding of this topic closer to the present-day formulation of Just War Theory. Aquinas' famous text, *Summa Theologicae*, devotes a section to Just War. In this, he lays out three necessary conditions for a war to be just: war must be waged by a proper sovereign authority, war must be waged for a just cause, and war must be waged with the ultimate intention of peace (Aquinas, 1920). These components borrowing from the work of his predecessors constitute a broad framework of Just War Theory. Aquinas delineates the guidelines for how war may be just but maintains that clerics should not partake in war regardless of whether it is just. He wrote, 'Clerics may, by the authority of their superiors, take part in wars, not indeed by taking up arms themselves, but by affording spiritual help to those who fight justly' (Aquinas, 1920). According to political scientist Gregory Reichberg, Aquinas is simultaneously validating just war and evangelical nonviolence (Reichberg, 2010). Aquinas' argument is not that fighting in a war is wrong, but that those who are devoted to the work of God have a purpose that is higher than fighting. This differentiation between the clergy and laymen allows each to act as they must while protecting the church from becoming too embroiled in conflicts. This was a step towards a more secularized Just War Theory, which has allowed scholarship on just war to advance while the role of the Church has minimized within society (Aquinas, 1920).

As the nature of the war has evolved throughout history, war theorists have also been challenged with new and different questions over and over again. Much of the base of 'International Legal Framework' or what is called the International Law is rooted in Just War Theory. Jurists like Grotius or Pufendorf have used in their legal writings the

idea of 'just cause' and 'legitimate authority'. The main principle of national sovereignty in world affairs is an outcome of the JWT formulation of authority. The principles and standards of *jus in bello* and *jus ad bellum* have been integrated into the Conventions of Geneva and Hague, the UN Charter and several other international treaties.

Moral debate has been part of the strategic logic in order to decide when, where, and how to conduct wars. This is how the civil and military authorities are presenting the reasons for war to the world. In his essay entitled 'The Victory of Just War Theory (and the Dangers of Success)', Micheal Walzer wrote: 'Maybe naively, I am inclined to say the justice has now become, in all the countries of the West, one of the standards that any suggested military strategy or tactics will meet-only one of the tests and not the most critical one, but that still gives the JWT a place and a position that it never had' (Walzer, 2002).

Military conflict language is justification language. Armed conflicts kill people and destroy property, resulting in every kind of imaginable harm in enormous quantities. It is madness to do these things without reason. It is unjustifiable to do these things with bad reasons. It may be unjustifiable to do these things for good reasons if the same aims could be done with less destruction and death by other methods. These harms have been greatly magnified by contemporary armed conflicts, and as such the burden of justifying has substantially increased (Hallgarth, 2013).

During the period of Gulf War which took place between 1990-91, in the bombardment of Serbia over the oppression of the Albanian Kosovars, in the campaign in Afghanistan directed at the Taliban and al-Qaeda, and most recently in the recent use of military force to eliminate Saddam Hussein's despotic government in Iraq, the United States

and, to a large extent, similarly the British, used just war theory to justify their use of war as in compliance to basic principles of *jus in bello* (Jonshon, 2005).

Of course, like everything, the Principle of JWT can be used instrumentally. Such an aspect continues to remain the biggest challenge for a philosopher and for those who want apply ethics requirements to military conflicts, intended to strengthen the constraints imposed by justice on warfare. Here continues to remain a need to defend justice, even under intense scrutiny in the situation of war-related decision making. The ongoing criticism of warfare is a key exercise in any democratic reality.

‘Ethical agents’ realize by definition the difficulty and severity of war; their recourse must therefore be justified. ‘The tradition of just war, with its contemporary foundation in international humanitarian law, remains the best time-tested mechanism for critical and moral consideration of the justifying burdens associated with the use of armed force’ (Hallagarth, 2013).

If we look from the historical and ethical point of view, use of the aggression and violence is assumed to be robust. The JWT itself deals with the rationale to override this heavy presumption to wage war. Traditionally, the tradition of just war denotes Western cultures ‘efforts to regulate and contain violence by setting up widely recognized combat rules.

JWT is an effort on the part of humanity to civilize and humanize the inevitable use of war. Some experts believe that JWT is a collection of artfully put together excuses to justify other human beings ‘unjustifiable killing. The procedural rigidity of JWT causes the killing of civilians to be accepted, stressing that it stresses policies and intentions over the effects of the conflicts themselves (Bruke, 2007).

JUS AD BELLUM

JWT constitutes numerous requirements for engaging in war and how to act in battle. *Jus ad bellum* applies to the circumstances under which States may resort to war or to the general use of armed force. *Jus ad Bellum* is about whether or not one has a just cause for going to war whether the war as an enterprise is morally permissible. The *jus ad bellum* rules emerged from the writings of various ancient and medieval thinkers as they sought to understand the morality of war. Over the centuries, a general consensus has been reached about the formal conditions that make up *jus ad bellum*, although there is a great deal of debate about how each condition ought to be interpreted (Frowe, 2016). The prohibition against the use of force amongst States and the exceptions to it (self-defence and UN authorization for the use of force), set out in the United Nations Charter of 1945, are the core ingredients of *jus ad bellum* (Frowe, 2016). There are six conditions that are widely agreed to make up the requirements *jus ad bellum*:

- Last resort;
- Reasonable chance of success;
- Right Intention;
- Legitimate authority;
- Just cause;
- Declaration;

It is important to evaluate, beginning with the requirements of *jus ad bellum*, how armed drone technology complies to the principles of JWT.

Last Resort

The war can only be just when all other means of averting a threat or seeking redress have been exhausted. These alternative measures include diplomatic pressure and negotiation, economic situations, trade bans, and the issuing of UN Security Council

resolutions to warn states of the perils of their behavior. Often, the attempt to avoid using military force will involve a combination of these tactics.

The use of armed drones raises concerns with regard to the last resort principle, which holds that the use of armed force and armed drones in particular is only permitted after all other mode stands exhausted. The president of United States and his key advisors had a serious debate until the end of 2012, whether remote-warfare killing must be a last resort measure against potential threats to the US, or a more adaptable tool to help allied governments attack their adversaries or to deter insurgents from controlling sovereign territory (The New York Times, 2012).

Armed drones are effective to some degree, as armed drones can increase the last resort threshold of massive-scale combat deployment by providing a means to escape wide-scale deployment of troops or performing major bombing campaigns while still mitigating perceived threats. Ironically, however, the growing use of armed drones indicates that countries may be willing to behave with potentially alarming ease. Since armed drones are considered a degree of force short of war, use of it can also be seen as a tool in which the last resort concept does not adhere (Brunstetter & Braun, 2011).

The armed drone attacks of the Obama administration are in defiance of the last resort principle Alternatives do not seem to have been discussed, whether in the context of agreements or law enforcement measures Nonetheless, a notable characteristic of the counter-terrorism policy of the Barack Obama administration is that no hostages are taken, and thus the question of how to handle suspected terrorists arrested is largely avoided so central to the George W. Bush administration still existed (Linden, 2015).

A serious policy of counter-terrorism should respect human rights even as providing educational initiatives intended to prevent population radicalization. There is a need for a real policy which would rely more on fighting the illegal flow of capital and resources

that enters the coffers of militant groups from around the world. In reaction to 9/11, the use of armed drones by US forces after the war in Afghanistan cannot be deemed fulfilled.

Reasonable chance of success

The requirement that one should wage war only if one has a reasonable chance of success prohibits the fighting of a war ‘against all odds’, even if one is resisting unjust aggression. The reasoning behind such a prerequisite is as follows: the decision-makers of a state should not send their army until they have a real chance of winning, sending them to be slaughtered is not permissible. Leaders are not allowed to sacrifice others’ lives for a hopeless cause. This principle is aimed at preventing mass crime from futile actions (Frowe, 2016). This is an important principle within the just war tradition that, because death and destruction inevitably result from war, there should be a reasonable chance that a would-be user of force will be victorious and bring about a better peace than currently exists (Enemark, 2014). Armed Drone strikes were quite successful in killing al-Qaeda’s top brass both in Afghanistan and Pakistan. Targeted killing by armed drone attacks appears to be very successful at this level of analysis. Using armed drones has hampered terrorist groups’ ability to attract, train, plan, and handle global terrorist attacks. Nevertheless, the party was not immediately and positively struck and remained a threat to the Afghans and the world community as whole.

Armed drones attack program to counter terrorism, conducted in various parts of the world, has limited opportunity to achieve the target. Armed drone strikes could have the effect of interrupting a nonstate actors’ leadership or temporarily diminishing its operational capacity; certainly, a war based exclusively on targeted assassinations of armed drones cannot reasonably be considered as an efficient means of eliminating the

terrorist phenomenon from the earth as we know it. Armed drone strategies will lead to immediate tactical advantages, but not long-term strategic advantages, so that the terrorism threat can be thwarted and ultimately defeated in the ways we experience it presently (Enemark, 2014).

A study by Walsh reveals that armed drone strikes have not been effective in reducing the output of propaganda by al Qaida. Another study by James Walsh and John Szmer suggests that the effect of armed drone strikes is different in different groups. In the case of more cohesive groups such as the Taliban in Afghanistan their impact is negligible, whereas in cases of more fragmented groups, such as those operating in Pakistan, these attacks would work as a cohesive force ultimately triggering more violence instead of reducing it (Chehtman, 2017).

In the words of Byman armed forces method usually fails to precisely measure the morale, recruitment, fundraising, organization, ability to perform technologically advanced attacks as well as other vital components of the adversary's status. If al-Qaeda could still recruit members, sustain assistance for its members, finance its activities, manage its organizational structure and mount advanced operations, even a senior commander's loss often has little adverse effect on its strength and size (Byman, 2003).

Right Intention

The condition of the right intention is closely connected to the idea of just cause. Augustine held that state-sanctioned killing can be permissible only when it is aimed at preventing or correcting an injustice and that a state may use combatants only for just ends. Their goal should not be to pursue narrowly defined national interests whenever war is being fought, but rather to restore a just peace. This state of stability should be superior to the prevailing conditions even if the fighting had not happened. The war carried out by armed drones makes it much easier to break the principle of 'right

intention' (Linden, 2015). The frequent use of armed drones has nearly eradicated the risk of death for American soldiers, drastically reducing the situations with which the US population is concerned. This disconnected approach helps decision-makers to follow objectives other than those declared and mentioned officially.

A final point worth making in this *jus ad bellum* assessment of armed drones is that the reasonableness of prospective success will be determined by the scope of the just caused violently pursued. The just war tradition compels users of force to contemplate the ending of wars, ethical restraints on the resort to and use of force are given meaning by the imagining of lives being lived in a subsequent peace (Enemark, 2014).

Legitimate authority

The rule of *jus ad bellum* specifies that war can just only if it is fought by an appropriate body or legitimate authority. This usually means that a war can just only if it is sanctioned by the head of the warring state, such as the president, prime minister or monarch, or by an elected representative body such as congress or parliament. Rulers are supposed to declare the war not the private, since responsibility for public affairs is entrusted to the rulers, it is they who are charged with defense of the city, realm, or province. A legitimate authority is a person or group who has the authority to speak for the state and who represents the state on the international stage. A main criterion for the definition of *jus ad bellum* specifies conflicts must be announced and waged between groups recognized as legitimate either in the global arena or by the organizations they represent 'The sovereign has the power to start war in a state' (Pufendorf, 1682). The prerequisite of legitimate authority grants sovereign states with the authority to enforce laws within a given territory the legitimate right to recourse to war on states and their allies.

It is appropriate to give the state the power to declare war. Wars are typically fought to defend the interests of the state, such as territorial integrity and sovereignty. Whether or not such concerns are threatened and therefore require recourse to war, is a matter which requires public consideration on the part of the agent charged with the duty of protecting such interests. In addition, killing is usually wrong, and as far as possible the possibility of declaring and waging war should be restricted.

There is, however, considerable debate over extending this right only to the countries and the potential extension of that same right to terrorist groups. It is universally recognized that several countries do not reflect their people's best interests. If we accept that people without states may have the right to self-determination, we must also rationally conclude that some non-state entity should defend and vindicate this right and that this body should be able to act as a legitimate authority and commit acts of violence on behalf of the people (Valls, 2000).

The idea that only a head of state, or some other suitable representative, can declare war has been the subject of a great deal of attention in recent years. As the military focus of the west has shifted away from states and towards terrorist groups like al-Qaeda, wars seem to be increasingly fought against non-state actors. The very notion of war on terror implies that it is possible to be at war not only with other states but also with non-state actors. But terrorist groups like Al-Qaeda, for example, despite having a command chain and political purpose, lacks legal authority, and despite having undoubtedly breached US interests on 9/11, retributive acts of widespread violence by the US cannot be justified as acts of war because Al-Qaeda constitutes of a group of persons. In the case of the United States, the 2001 AUMF, which was eventually proposed by the US President and passed by US congress, endorsed the right of the country to self-defense and to use all necessary and appropriate force to stop future

terrorist acts against the United States. Until date, the AUMF has not been repealed or amended by the US Senate, meaning it still applies. Nevertheless, the longer time passes by, the more difficult it becomes for the US administration to justify its war deeds abroad as protected by that same authorization. Indeed, the correlation between the events of that took place 9/11 and the circumstance that led to attack suspected terrorists in Somalia ten years later is becoming more and more difficult to demonstrate. It really is peaceful, in this relation, that in the wake of 9/11 attacks, the US had a legal authority to fight war against the non-state actors like al-Qaeda and Taliban, based on the right of self-defense as enshrined in U.N. charter Art.51. Terrorist organizations that do not have international legal personality cannot be granted the same legitimate authority.

Just Cause

In ordinary language, we often describe a state as having just cause for war when it satisfies all the *jus ad bellum* conditions, taking just cause to be all-things-considered judgement about morality of a war. A just cause for war is usually defined as a military act that violates a state's sovereignty. In the philosophy of just war, the natural moral position is that war under any given circumstance is unfair, and if war has to be fought at all, it has to be waged with a just cause. Article 2.4 of the Charter of the United Nations states that 'all the countries shall avoid from the threat or use of force in their international relations' (Reisman, 1984). As a result, a state that intends to resort to military force must prove this is not happening out of mere self-interest. For example, self-defense against foreign aggression (Art.51 of the Charter of the United Nations) can also be used as a just cause for war (Reisman, 1984).

One of the draw-back of Just cause within *jus ad bellum* is State and non-state actors alike are unified in their belief that their respective causes are just. Non-state actors waging war people seeking revolution-are often labelled terrorists or insurgents, but

‘virtually any warring non-state group will claim, and probably even believe, that it is fighting for a just cause’ (Weiner, 2017). It is thus a near inevitability that the incitement of any conflict will be considered justified by the aggressing party. It remains unclear whether seventeenth century ‘unjust’ war ideas ever really limited the use of military force. They may well have done more to delegitimize the enemy and justify the cause (Kennedy, 2006). This delegitimization of the enemy is a recurring theme that is often apparent in the names assigned to wars. The very name of the War on Terror implies that terror an idea can be fought the same way a war on a state actor can be fought. This characterization has served to broaden the scope of US conflicts in the 21st century.

The terrorist attacks of September 11th, 2001, catalyzed the US to declare a War on Terror on the groups responsible for the attacks. Nevertheless, the AUMF enacted in order to respond to 9/11 was deliberately vague in identifying the enemy. It allowed military power against ‘all those countries, groups or individuals which the President of US decides has conspired, conducted, authorized, or directly helped in terrorist attacks which took place on 9/11, 2001, or has nurtured such groups or persons (Grimmett, 2007). With a compelling case of self-defense following 9/11, the US met the *jus ad bellum* criteria to respond to the attacks. The AUMF served as a formal declaration of conflict by a legitimate state authority, which provided the US effort with credibility. A resort to self-defense war against al-Qaeda and the US strategy of armed drone strikes during the conflict tend to be in keeping with the JWT’s of just cause. To legitimize the use of such methods in other conditions in which the United States has waged its war on terrorism seems rather more problematic. In such situations, the use of legal preventive defense including the use of armed drones and targeted killing of insurgents in such areas, should be justified on an assessment of a threat’s imminence. As per to the given US justification, the danger was real and immediate,

but in the lack of credible data for inspection, it is impossible to ascertain with any confidence whether or not the just cause requirement has been met.

Declaration

The 1907 Hague Convention demands that war should not begin without advance or clear warning, in either the form of a declaration of war, explaining the reasons, or an ultimatum with a war declaration conditions. Requiring that a war be made public is important in several respects. It allows the people of a state to debate the war, lending an individual or group of individuals. It also makes it possible for the target of the war to try to seek a last-minute peaceful solution to avoid war. It is not intended thereby to say that war can exist only after a declaration; the contrary undoubtedly is true, but the announcement is sufficient evidence that peace has been transmuted into war, and that the law of war has replaced the law of peace. This may be accomplished by the declaration of one state alone. Lord Stowell was quite clear as to this:

When there is a declaration of war by one country only, it not a just challenge, to be accepted or refused at pleasure by the other. It reflects that there exist actual hostilities on one side at least, and puts the other party also into a state of war, though he may, perhaps, think proper to act on the defensive only (Eagleton, 1938).

‘It should be in the form of either a reasoned declaration of war or an ultimatum with a conditional declaration of war’, as per the Hague Convention; and it should not take effect as regards neutrals until they had been notified-though they were not excused if they could be shown to have had knowledge of it (McNair, 1948). The form in which this notice has been given has varied with time.

Modern warfare is especially directed toward the rapidity of action, and it is not to be expected that they would lose the advantage of swifter attack by waiting for and after a declaration. It is perhaps assumed, too, in these days of ubiquitous and omniscient

newspapermen, that enough information will have been published to give some warning to the state about to be attacked. The declarations during the World War were of little significance in this regard; each state knew as well without a declaration as with it, the danger which was threatening. Thus, the element of sportsmanlike warning, which seems to have been the original purpose of the declaration, is no longer served, or may easily be evaded.

The rule requiring a declaration of war has been of value in the past; it becomes defective now because of a new situation in the community of nations. Its defect lies in that it permits a state to judge for itself on a matter which is no longer the exclusive right of a sovereign state, but which is now recognized to be a matter of concern to the entire community of nations. The community may not yet be able to enforce a rule forbidding war, but it cannot afford to legitimize hostilities on the scale of war by permitting the war-making state, in its independent judgment, to decide that it is not making war. On the other hand, if the community is to declare such use of force illegal, it could as easily, and should declare all use of force illegal, whether as declared war or not.

Jus in Bello

The rules of *jus in bello* (or justice in war) serve as guidelines for fighting well once war has begun. Some maintain that morality does not exist in warfare, and therefore object to just war theory. War is hell, the argument goes, and one is entitled to do whatever is necessary to ensure victory for one's side. Just war theory, on the other hand, sets forth a moral framework for warfare and rejects the notion that anything goes during times of war. Belligerent armies are entitled to try to win, but they cannot do anything that is or seems, necessary to achieve victory (Walzer, 2006).

The following requirements: discrimination and proportionality are to be met for *jus in bello*.

Discrimination

The very foundation of the principle of discrimination says only insurgents/combatants could be legitimately prosecuted. The discriminatory ability of armed drones relies on their real use and the motives of those who control them from a distant location. As such, they are also not necessarily indiscriminate, but this is highly dependent on who provides orders like any other firearm or weapon system. The very same situation that armed drone strikes often occur not in conflict-related battlefields, but in counter-terrorism activities, much further than declared conflict zones, implies that special care must be taken to ensure that no innocent people have been affected.

It is quite hard to distinguish between combatants and non-combatants because terrorists /fighters do not wear uniforms and mingle with people. The decisions to target someone are made purely on the amount of information gained from surveillance and tracking. A common issue about the use of drone strikes is that they are used on people who may not be legitimate military targets or that the legality of the target has not yet been appropriately ascertained (Kenneth, 2015).

It is very well established that weak intelligence may result in bad decision making, and the disadvantages of such decision making have sometimes resulted in the death of civilians. One instance of an incident that occurred in 2001, the US targeted what they thought was a Taliban compound on the basis of incorrect information, although it was an Afghan wedding. Discrimination is exacerbated by physical closeness and as armed drones fly at higher altitudes; their accuracy threats are sometime to be unreliable (Enemark, 2014). On the contrary, some scholars argue that armed drones enable visual identification to be much more precise and, more importantly, armed drones eliminate

the connection requiring virtual contact between the attacker and the attacked. But there is still possibility of making mistakes, though. A strategy which can be compatible with the principle of discrimination would be for the decision to be delayed and rescheduled until all potential questions about the identification of the objectives have been resolved.

A lower rate of non-combatant casualties resulting from Armed drone attacks might end up making them more morally justifiable; indicating a close relation between expected and actual results. But collateral damage in high numbers would blur the realistic and moral difference between armed drone operations and non-drone interventions (Enemark, 2014).

Outside regions of announced warfare, it is difficult to accept an individual's signature strike solely relying on the outcome of brief examination of 'life patterns', given the presumption of innocence that must be given all innocent civilians. At the same moment, it is an erroneous approach to rational targeting to threaten an individual because he lives in an environment where people carry weapons on a routine basis. Assuming all people of military age are fighters runs counter to the presumption of innocence; indeed, an individual should be seen as a noncombatant until there is a substantial evidence of the reverse.

On a purely theoretical level, for the excellent surveillance capability and accuracy it has, the frequent use of armed drones is likely to adhere with the principle of discrimination. Nevertheless, data available on public sources suggest that there has been and appears to be a large number of civilian casualties.

Proportionality

Proportionality is probably the most difficult criterion to be extended to armed drone use in jus bello evaluation Proportionality prevents vast numbers of civilians from being

killed as a side effect of completing a military target. On the one side, in strictly empirical statistics, we have human lives whose worth cannot be quantified. On the other hand, it is important to analyze the possible tactical advantage arising from the death of a terrorist suspect in probabilistic terms (Bohrer & Osiel, 2013).

Proportionality, together with distinction is one of the fundamental principles of the principle of JWT. As already mentioned, the principle of proportionality outlaws attacks 'which could be expected to result in accidental loss of innocent civilians, harm to civilians, damage to civilian property, or a mixture of them that would be disproportionate in comparison to the anticipated real and direct military benefit' (ICRC, 1977). Reading simply, the word 'excessive' simply means 'too big' and leaves the criterion completely open to decide when there is too much risk to citizens in contrast to the potential tactical advantage. Notwithstanding its significance, proportionality has been one of the most challenging practical tests as it is called upon to satisfy two seemingly conflicting demands: on the one hand, deterring collateral damage, on the other, assuring a tactical advantage. The very same derivation of the principle is ambiguous, and that we cannot expect *jus in bello* proportionality which provide clear or legally binding guidance in the overwhelming majority of combat scenarios facing attacking forces.

It is highly hard to determine with surety if the principle of proportionality has been obeyed, the confidentiality of the armed drone strikes, the mode of preference of objectives and collateral victims for each strike. Each independent attack investigation has revealed much more civilian deaths than officials of the administration accept. In a 2013 speech on armed drones, the then US president Mr. Obama said there was no attack without 'close-certainty that no innocents will be injured or killed' (The New York Times, 2013).

For the US, the proportionality of an armed drone strike exists in the significance of an insurgent it eliminates. If these same insurgents are heads of terrorist groups, the attack would be more effective in the warfare, meaning that the attack is more probable to meet principle of proportionality even after having civilian casualties.

Those in favor of the armed drone attacks say it's full-filling *jus in bello* criteria, suggesting that the number of innocent deaths from the raids has decreased over years. This would result in armed drone attacks enhancing their quality in relation to proportionality, possibly enough for at least some of the attacks to meet this requirement.

Conclusion

Several scholars have argued that the JWT has become too old and it's not adequate to deal with the Modern world military wars where the enemy is dealt with quite differently from conventional warfare. It is not exactly right to argue that modern technology requires new war regulations. The use of armed drones in the fighting terrorism is accommodated by existing basic principles of JWT. Its principles, drawn from the decades-old tradition of JWT, could be classified as victim friendly rather than highly sophisticated arms-specific and binds all irrespective of whether action is used by ground, sea, air, controlled and unmanned (Friberger, 2013). It is clear from a brief inspection of the correlations between the use of armed drones and the basic principles of JWT that they were not obeyed. In theory, however, in accordance with any of these principles, the armed drones could be used, which would make a system capable of fully respecting moral and ethical values (Friberger, 2013).

Moreover, over the last twenty years, and notably afterwards disintegration of USSR, the JWT is used as a moral basis for recourse to war, mainly from the US government. Such kind of use is what concerns this school's theorists, who have been worried for

centuries with searching principles and basic standards that might have restricted the recourse to war and might have monitored the course of war by helping to make it more moral and less horrendous. Therefore, the basic principles of JWT is being challenged today like never before not only on the ground of misuse of high end modern technologies, which, although aimed with an intention to reduce collateral damage and devastation, have been most of the times used in such a non-discriminatory way. Consequently, today the JWT is questioned not only by the misuse of emerging technologies, or something that, although intended to avoid civilian casualties and devastation, have often being used in a non-discriminatory manner. The major challenge for the basic principles embedded in JWT is to be able to sustain the partisan and instrumental use that decision-makers make of it when, exactly in disputed cases, they appeal to those principles to justify armed intervention.

In fact, armed drones are extraordinarily accurate, and the same functionality would succeed in making it a step forward in humanitarian warfare. In theory, it could target insurgents with sumptuous discrimination in the background of armed conflict. Yet as has its own limitations and it can act as per the available intelligence, sometimes even the incorrect people are killed. The recent record of armed drone use has included the US government's interventions in Libya for humanitarian purposes and in Afghanistan for self-defense purposes, but elsewhere its pre-emptive use of armed drones is less easy to justify. In the War on terror, if the degree and manner of armed drone use exceed what is required for self-defense, the United States might emerge as an actor more sinning than sinned against. Moreover, by asserting a right to strike pre-emptively against those suspected of planning attacks, the United States is running the risk of creating dangerous international norms. It is worth contemplating, therefore, for example, what if china sent armed drones into Kazakhstan to strike Uighur Muslims it

accuses of plotting terrorism. Similarly, what if India uses an armed drone against Pakistani based terrorist groups for plotting terrorist attacks like 26/11 in India? (Enemark, 2014).

Chapter 4

Armed Drone and Future Warfare

Introduction

Ever since people started forming civilizations, the disputes, armed conflicts and wars have started occurring. The cause could be disagreement on territory ownership, attempt to claim natural resources, difference in people's opinions and other reasons. But the entire time the need to possess with better weapons and technologies have existed for almost all participating parties. And if not, the probability of being on the failing side rapidly increased. It is no secret that one of the most important drivers for scientific and technological advance is the human will to wage war, or to feel safe with appropriate defense mechanisms. A good few of the scientists are aware of this fact just like the economists do (Strickland, 2010). One could wonder what was invented during the WW I, WW II and Cold War that we consider today matter of daily routine of our consumer lifestyle. It could be surprising for some that the most common product of war is the tampon or feminine pad, which was firstly used during WW I to clean soldiers' injuries but proved to be useful by hospital nurses for slightly different purpose. Similar story applies to the twinkies invented due to fruits rotting fast in WW II, tabasco sauce from The Civil War and Nylon Stockings coming in WW II as well. (Mendoza, 2010). But what about the technology used only just for the armed conflicts as weapons and weapon support? One of the most common materials which can be found in any household is polytetrafluoroethylene. Wonder what that is? Well do be sure that it is just the material which was used in the Manhattan Project as valves

coating and pipes sealing and was used for the first time in 1954 to produce modern pan under more common name 'Teflon'. Similar inventions can be found in far more industries like pharmaceuticals, air traffic, data security etc. (Rhodes, 2012). It would be easy to find loads of evidence to prove how important is war as the driver for future technological.

Riskless Warfare

Armed drone makes it possible for combatants to monitor and kill their enemies without exposing themselves to the dangers of the conventional battlefield. When an aircraft has a pilot on board, there is a need to accommodate and protect fragile human flesh in the engineering, construction and use of that aircraft. By contrast, an armed drone requires no cockpit pressurization and temperature control, and it has more space and payload capacity for fuel so that it can stay in the air for longer time. Armed drones are hard to detect and destroy and, even if they are destroyed, their destruction causes no direct harm to their operators. Armed drones 'can unarguably protect humans in various ways, they might eventually turn out to be cheaper in some respects, and they do not violate international law per se' (Frederik, 2013, p.375). The technological strengths of the weapon and its transformative stance in modern warfare are hence repeatedly emphasized to vindicate deployment. Armed Drones provide soldiers and intelligence services with the most accurate distinction between militants and civilians in targeting operations, thus '[s]marter weapons like the Predator (Type of Armed drone mainly used by CIA) make for a more moral campaign' (Williams, 2013, p.183). These arguments continue to be maintained despite the high statistics of civilian casualties and technological weaknesses that remain evident.

Armed drones are indisputably the most humane, precise and the clean way to protects one country from terrorist attacks. This statement is especially true when one considers potential alternative methods, such as arrests or aerial bombardment by clumsy,

conventional manned aircraft of the sort used in bombing campaigns in Afghanistan, Iraq, Kosovo and Bosnia. In the military terms, the armed drones ‘project capability without projecting vulnerability’ (Williams, 2013, p.183). But most importantly, armed drones keep civilians’ deaths to a minimum. The Wall Street Journal best summed up this argument for relying on the armed drones:

‘The case is easy, Not even the critics deny its success against terrorist, able to go where American soldiers can’t, the Predator and Reaper (both types of Armed drones mainly used by CIA) have since 9/11 killed more than half of the 20 most wanted al Qaeda suspects, the Uzbek, Yemeni and Pakistani heads of allied groups and hundreds of militants. Most of those hits were in the last four years. The Civilian toll is relatively low, especially if compared with previous conflicts. Never before in the history of air warfare have, we been able to distinguish as well between combatants and civilians as we can with armed drones. Even if al Qaeda doesn’t issue uniforms, the remote pilots can carefully identify targets, then use hellfire missiles that cause for less damage than older bombs or missiles. Smarter armed drones like Predator make for a more moral campaign. International law also allows states to kill their enemies in a conflict, and to operate in neutral countries if the hosts allow bombing on their territory. Pakistan and Yemen both have given their permission to the US, albeit quickly. Even if they hadn’t, the US would be justified attacking enemy sanctuaries there as matter of self-defense’ (The Wall Street Journal, 2010).

Asymmetry of risk between belligerents is nothing new. The purpose of weapons development is precisely to provide one’s own combatants with better tools than those possessed by the enemy, thereby giving one’s own side a military advantage. Nonetheless, people have objected certain ways of minimizing risks to combatants (Frowe, 2016, p. 224). For example, just as the decree of Pope II failed to actually stop

soldiers from using the crossbow, a simple rejection of autonomy and enhancement will do nothing to ensure a stable future of warfare (Ma, 2016). Similarly, when the use of the longbow became widespread among the English in the fourteenth century, their enemies deemed it a rather cowardly and unchivalrous way to fight, since it enabled combatants to kill from distance rather than in hand-to-hand combat.

However, some writers argue that armed drones are distinctive they do not merely reduce the risks to their operators, but in a practical way eliminate them. Whereas the longbow made archers somewhat safer than combatants who were fighting with swords and shields, the archers were still on the battlefield and vulnerable to attack. This is not true of Armed drone operators, who are often in a different country to the people they are targeting (Frowe, 2016, p. 224).

Over the past few years, public frustration with military defense casualties has increased, and policymakers have felt the hit of public opinion to fight wars in ways that reduce combatants' risks, or to stop war when there is the possibility of a high number of civilian casualties. According to Coker, during the Vietnam war by US, 139,000 young American men declined to be enlisted to fight in the Vietnam War largely because 'historical symbols like manifest destiny that had motivated the country in the past had started to lose their creative appeal' (Coker, 2001, p.32). Richard Betts has argued, the Vietnam war revealed that US public support is undermined by 'casualties in an inconclusive war, casualties that public sees as being suffered indefinitely, for no clear, good, or achievable purpose' (Betts, 1995-6, p. 76). Between 1961 and 1975, nearly 48,000 deaths among US soldiers were reported. The extent of affinity to the victims began to increase, and it was quite simple and clear to deduce that the victims undermined general public's green signal for policy choices which led to war, especially when the public considered such a tremendous effort as

inconclusive (Betts, 1995-6, p. 76). The protection of one's own forces goes to 'the moral component of nation's fighting power' (Clegg, 2012, p.134) and serves to reinforce 'national will', this new way of war amounted to stark reversal of the high-casualty Napoleonic model. No longer heroic, America's wars began to be characterized instead as Post-heroic (Enemark, 2014, p.12).

The term Post-Heroic war can be traced to the article in Foreign Affairs magazine by the military historian Edward Luttwak. He claims that 'consistent with the dynamics of pre-industrial and early industrial society, with families having multiple children and losing some to disease was completely normal' (Luttwak, 1995, p.115). Therefore, for parents to lose a son in war, while devastating, 'was inherently less unthinkable than for today's families' with fewer offspring's, each of whom' is believed to survive into adulthood and represents a large part of the psychological culture of the family' (Luttwak, 1995, p.115).

In the similar vein Sebastien Kaempf argues, 'modern warfare' has gradually changed the Post-Vietnam War into risk-free warfare largely due to the rise of America as a postmodern society structured around the avoidance and management of risks. Distributional conflicts over 'goods' such as jobs, social security, and income have given way to distributional conflicts over 'bads' that is, the risks created by threats to individual life, health, and well-being and led to rise heroic to Post Heroic warfare (Kaempf, 2014, p.83).

From such a point of view, armed drones end up taking war from heroic to post-heroic warfare to be waged without jeopardizing 'combatants' lives and thus eliminating the probability of inciting domestic political controversy or public outcry against decision-makers. In times when the extent of tolerance for innocent people deaths has fallen sharply as well as the concept of combat has become less heroic, the emergence of

new weapons technology such as armed drones has become a facilitating factor between two opposing claims. It has become increasingly attractive to rely on armed drones to conduct war. The main goal is to eliminate the ‘full-scale conflicts,’ thus eliminating geopolitical threats and as much as possible protecting military personnel. As Mahnken stated, since the 1990s, the US has become heavily involved in wars in which they have small aims, narrow ambitions, and are willing to make modest sacrifices. The rapid hike in the use of air power after the collapse of the Soviet Union seemed to be particularly suitable for these conflicts (Mahneken, 2008, p.178).

It might seem obvious that if one is able to fight a war in a way that significantly decreases the risks to one’s own combatants, this good thing that we ought to encourage. This is especially so if we endorse the reductive individualist view that just combatants do nothing wrong in fighting, and will have their rights violated if they are killed by unjust combatants. Bradley J. Strawster has argued, it seems wrong to ask people engaged in justified self-defense to incur unnecessary risks (Strawser, 2010, p. 348). Of course, it’s possible that people might use armed drones in pursuit of an unjust cause. But then it seems that our objection ought to be to their fighting at all, not to the fact that they are using insufficiently risky weapons. And even if we reject the reductive individualist view, we might still think that states in general owe it to their combatants to minimize the risks that they incur by fighting. Combatants already take on significant risks for the benefit of other people in their state. Denying them access to weapons that minimize these risks asks them to shoulder yet more of the burden of advancing their state’s interests (Frowe, 2011, p. 224).

Asymmetric warfare

Asymmetric war can be characterized as the ‘disproportion of strength between the opponents at the outset, and from the difference in essence between their assets and

liabilities' (Galula 1964). The term asymmetry can refer to any imbalance in the strength that each side in a conflict can bring to bear against the other. All wars may and should be regarded as asymmetric in the sense that perfect equality of strength at a given time and place is both highly unlikely to occur and practically impossible to verify (Enemark, 2014, p.59). Attackers do not risk huge casualties, but on the other side, they are able to hit the unprepared enemy hard.

On a chessboard, two opposing sides engage in a perfectly symmetrical contest. Each side has clear and distinguishable uniforms (black and White), the battlefield is physically bounded, and there are immutable rules on how the contest is commenced, conducted and terminated. Not only is the game of chess a completely fair fight between combatants, therefore, it is also a fight in which there is never any participation by non-combatants (Enemark, 2014, p.58). In exploring the ethics of asymmetric war, Rodin has argued that 'when conflict diverges too drastically from the assumption implicit in the chessboard image of war, we experience serious difficulties in interpreting and applying standard judgements of just war theory' (Rodin, 2006, p. 153). When armed drones are used in counter-terrorism in particular, some scholars are of the opinion that the use of armed drones creates an unassailable asymmetry between the warring parties. In the same way, Kahn (2002) argued the use of armed drones would lead to a higher degree of asymmetry between the warring parties as to produce immense moral problems (Kahn, 2002).

In the words of Margolis (2005), the new forms of warfare have modified two fundamental principles embedded in JWT: on the one hand, the distinction between lawful combatants and civilians; on the other hand, the prospect of restricting defense strikes to those who engage actively in wars. In fact, terrorists are mixing up and becoming indistinguishable from the civilians, bringing civilians as protective gear

into the equation. This is a matter of fact that, as recent wars seem to arise more close to civilian population centers, the concept of separation is particularly central to the proper regulation of contemporary conflicts (Margolis, 2005).

Those who are of the opinion that the 'new form of warfare' has come to an existence claims both in terms of *jus ad bellum* and *jus in bello*, a theoretical shift has occurred. In particular, the new strategies of war amongst not similar warring entities pose a fundamental challenge to our normative concerns about the just cause of warfare and the conduct of hostilities between warring parties. However, one might claim that the use of insurgent violence to achieve political ends is not at all new in the historical grounds, and therefore the use of the term like 'new war' might sound inappropriate at times.

In the words of Carter (2009) these wars need some adjustment of the basic structure of the JWT by extending, eliminating or creating new definitions that were not previously envisaged. Indeed, what we are seeing at present in the most of counter-terrorism policies is a defense strategy of preventive manhunting, not meant to react to attacks already in place, but rather to prevent the proliferation of rising emerging threats by getting rid of their potential operative (Crawford, 2008, p.12).

The use of armed drones has now become the best choice in an asymmetric conflict where the targeted killing of members of terrorist groups has become the prevailing tactical defense strategy. Use of the armed drones in remote warfare or extreme hostile contexts enables the movements of alleged terrorists to be constantly monitored and directly targeted without the need for troops on the ground. Some scholars claim that armed drone killing in combat tends to create an unprecedented asymmetrical division between the fighting potential of the warring parties, such as turning the war into something inherently unjust in principle. It is because armed drones can drastically

change the two sides 'positions, creating artificial upper hand for the most technologically sophisticated party. From this view, the use of armed drones will relegate the portion that does not use them to a kind of lifetime disadvantage. According to some authors, the technological gap in itself creates an insuperable asymmetry.

Chamayou states 'What is unique about current imperial conflict has do nothing with the distribution of asymmetrical power resulting into the unequal distribution of risk as a classic characteristic of all 'small wars' across the history than the kind of conventions that now form the great Western 'political' exercise of that aggression. If one finds something new about it, it could be all because the prevailing ethical and political norm was the practical quasi-invulnerability of the dominant group at the end of the cold war' (Chamayou, 2015, p.127).

Onto this point, Killmister, argues that 'remote warfare 'are likely to devise such a circumstance where all moral options for retaliation have been closed by the targeted side, forcing it to surrender or flout the criteria for the civil immunity. Remote warfare restricts the ethical options available to the part being attacked for retaliation. In the classical, JWT sanctioned, way of targeting fighters on the battlefield there is simply no response from a state under attack from remote warfare. Thereby, such a state has three options: it can target enemy civilians; it can surrender; or it can target what I have called civilian combatants in the aggressor state (Killmister, 2008, p.122).

For a several reasons, this argument is undefendable. First, a perfect equilibrium and balance between the warring parties 'capabilities with regard to their tactical, technological and militarily' in a course war is both highly unlikely and practically impossible to attain (Enemark, 2014, p. 79). Second, it was never an ethical or moral requirement for the war parties to be 'equilibrated 'from a military standpoint.

Moreover, such a reasoning, developed in the sense of a regular-state armed confrontation, could certainly not be accepted in a global perspective to counteract the terrorism perpetrated by terrorist organizations. In response to terrorist attacks, combat acts are carried out mainly in an exercise in self-defense. Third, it is precisely global terrorism's modus operandi to deliberately attack innocent civilians in order to sow fear and terror. More precisely, non-state actors violate the jus in bello's basic principles deliberately, and not simply because they are 'forced' to pursue these tactics in opposition to the counterpart's military superiority. Margolis argument is solely based on the comparison between states and terrorist groups. He is of the opinion that the use of non-conventional armaments and strategies from terrorist groups is to be considered as a perquisite to gain defense uniformity similar to conventional States. 'they (terrorist groups) cannot deny, a priori, the use of biological, chemical or even nuclear weapons, poisoning and suicide bombing, because they cannot in normal circumstances match the powers they mean to win over (Margolis, 2005, p.196). Any such kind of logic is quite hazardous, arguably. It suggests that terrorist organizations try to gain a tactical upper-hand from a position of conventional defense weakness by threatening and undermining the 'paradigm of war ', namely basic principles of JWT (Rodhin, 2006, p.154). A standard example of successful use of asymmetric action can be identified as the truck bomb deployed in 1983 against a US base in Beirut, which led to the withdrawal of the US Army from Lebanon the next year. For its efficacy, any asymmetric strategy hangs over certain extent of degeneracy of the jus in bello principles and, in particular, the idea of civilians' immunity (Rodhin, 2006, p.157). Rodin contends: 'it wouldn't be an overstatement to interpret as such strategies operationalize the adversary's moral disposition by making use of his reluctance to target innocent civilians as a source of strategic benefit. By doing so, they knowingly

expose innocent civilians to danger by making both fighting efficiently and upholding the principle of distinction impossible for the adversary.’ (Rodhin,2006, p.158) This argument only holds in its premises some legitimacy. Terrorist organizations won’t become strong and efficient enemies on the field if they did not ignore the normative framework enshrined in the Geneva Conventions, more specifically the basic principles of JWT. Here the argument could be framed as follows: non-state actors are longing to achieve defense uniformity state actors. Because the non-state actors lack the political, military, technology, funds and other kind of resources to tackle with a war-making state-system on an equal footing, they violate the principles of JWT to allow themselves to become reliable enemies. Nonetheless, if we go by this logic would lead to incorrect conclusions. If terrorist organizations do not feel bound to these principles, it would be floccinaucinihilipilification to try to reckon in terms of these principles for the justice or injustice of new types of war that has developed over the years. Essentially, such a position makes JWT inadequate for these disputes, and the principle itself becomes useless as a basis for determining the justice of new wars. Carter opposes such a claim unequivocally on the basis that the same possibility that non-state actors breach the basic principles of JWT can not in itself be used as a rationale for JWT’s irrelevance. There are countless ways, according to the Carter, to change the military imbalance that exist between the opponents that do not necessarily require collateral damage. It is matter of expedient for him rather than that of strict military necessity (Carter, 2009, p. 7).

If go through the History it tells that the insurgent groups have been using guerrilla warfare tactics on a several occasions over the different periods of time to overcome a tough adversary, often successfully. There are well known examples which can be cited examples like the Vietcong war which was fought against the United States in

the jungle of Vietnam and the Taliban rebellion against the Soviet invasion in the rough terrain of Afghanistan, and similarly in the Israeli-Palestinian crisis. While the asymmetric warfare idea is not new in itself, but what is new is the international momentum that this type of conflict has acquired over the period of time.

It is well known matter of fact that guerrilla warfare is widely accepted for having a mitigating impact on the power imbalance between opposing factions, discarding the applicability of the JWT regulatory framework on such a statement does not seem reasonable. Willing to accommodate such a point of view would entail consenting to fighting with different rules on a moral basis. Such a position would encourage Skerker's vision that the purpose of a deliberate violation of the JWT principles is to provoke the nation-state to violate those standards as well, thereby trying to undermine their moral superiority and legitimacy in the eyes of citizens of a particular place and, generally global community as a whole (Skerker, 2004, p. 31).

Alternately taking into consideration this theoretical framework as a whole could lead to a second order of consequences: which means both parties do not feel bound to the traditional collection of rules and restrictions as embedded in JWT.

For example, R1 which is weak, chooses not wear uniforms that clearly makes them visible as the combatants, in this circumstance, it cannot ask that the other party R2, which is strong to do so. The argument could be interpreted as implying that if the R1 violates law H, then the R2 is not obligated to obey H, i.e. the stronger party is morally allowed to violate H' (Skerker, 2004, p. 31).

This above cited approach would be binding to all parties to same laws, at the same point of time significantly downgrading the protections found in the basic principles of IHL. The plausibility of the principles of humanity, proportionality, discrimination and necessity cannot be exposed to a 'restriction process' if we face another adversary.

We won't be having the ethical right for making forceful compliance with these principles to the adversary if we were in the first place able to 'force' our regulatory criteria's. It is perfectly legal and lawful to kill a combatant in the course of an armed conflict. Something that is not causing serious and disproportionate suffering among innocent people, it must remain aloof from the all kind of atrocities of war in all situations and in any kind of war.

Wolfendale asserts it would be totally inappropriate to explain the basic principles of IHL as contradictory and obsolete principles established in an effort to satisfy the objectives of both parties involved in the armed conflict and to reduce the devastation of war. Rather, it will be logical to explain basic principles of IHL as a framework of regulations based on the ethical principles, like forbidding collateral damage and the ethical criterion for self-defense, for which we can devolve new combat features (Wolfendale, 2011, p. 22).

The asymmetry of morality is the fundamental dilemma of a war against terrorism. Non state actors use the adherence to the principles of just war as an advantage for their side. Combatants are distinguished from civilians, not a terrorist. Terrorism's very definition involves attacking civilians, thereby discarding any notion of reciprocity.

In the words of Ignatieff 'It is very significant to realize that terrorist groups/Islamic extremists heavily rely on the deliberate manipulation of your inability to cross these lines. And it is a matter of grave concern to deal with ethical and political problem while fighting a war against terrorist groups: how can we avoid being pulled over the line by such an adversary whose intention is to make us cross these lines? How is possible for you to recognize members of terrorist groups when the adversary does not wear uniforms, is it impossible to distinguish from civilians, who hides between and

within civilian populations to make your job harder? How would you recognize an adversary when the adversary does not wear uniforms, is impossible to distinguish from civilians, and hides between and within civilian populations to make your job harder? How would you avoid becoming ‘the adversary’? (Ignatieff, 2001, p.6).

Moral constraints should not be seen an attempt to restraint power or as a way of achieving sub-optimal military objectives. Ethics in the field is a significant force multiplier, as it helps soldiers to win the general population’s respect and support. It helps to strengthen a military intervention’s legitimacy and sets the boundaries between just and unjust fighters. Likewise, use of the armed drones against a heinous adversary does not in any circumstances allows the troops in armed conflict to do away with the provisions embedded in the Geneva Conventions. The enemy’s wrongdoings must not undermine the moral conduct of war approach, by the use of armed drones should never be regarded as a way of derogating from the main principles of *jus in bello*.

Proliferation of Armed Drones

The proliferation of military armed drones worldwide is accelerating at an alarming rate, due to the willingness of certain states, to export them widely. More than 35 countries may now have armed drones, with more than a dozen seeking to acquire them. While the US enjoys limited dominance in its use of armed drones, it does not have a technological advantage and several nations are still striving for similar programs and capabilities.

This spread of Armed drones is an important international security issue for several reasons. Most Important among them is that many countries buy armed drones from exporters who care little about how the buyers use them. For an example when the US sells a weapon system to a partner or ally, it requires the buyer to abide not only by

international law, along with other clause of restrictions as put forward. Whereas, on the other hand China sells weapons, it places no such restrictions or any additional clause of restriction. This may bring many problems in the long run. This makes it more likely that countries will use armed drones in ways that contribute to instability (House, 2018). Although more than 35 countries have recently obtained armed drones, at present, across the globe only United States is blessed with military system that allows it to use armed drones across the globe. It requires specialized and stable aerial platforms as well as comprehensive infrastructural and organizational support for armed drone warfare to affect international peace and stability. The US, as the operator of armed drones, has a unique opportunity to assess which countries are developing these devices and make them accountable for their use of these armed drones (Zenko & Kreps, 2014).

Armed Drone proliferation is taking place, and while only a handful of states will be able to operate stealth combat armed drones (Stealth fighting programs, including ISR and armed drones, constitute the highest level of technological sophistication), many will have access to armed drones that can infiltrate contested areas or other nations ' sovereign territories (Sayler, 2015). It is impossible to prevent the proliferation of armed drones that the aircraft is here to stay as close to the nuclear weapon. However, what this means for international security is an open question. Armed drones could heighten tensions in combat zones by encouraging cross-border strikes or incursions, or by restricting the ability of states to provide safe haven for terrorists and other proxies, they could increase international security. In conflicts, armed drones could create a new level on the escalation scale, maximizing conflict capacity, or could theoretically defuse conflicts by growing accountability on all sides.

Zenko and Kreps argues armed drones are unique in their ability to destabilize relations and intensify conflict. Armed drone reduces the threshold for authorizing military action by eliminating pilot casualty, potentially increasing the frequency of force deployment. Because there is no onboard pilot, drones are less responsive to warnings that could defuse or prevent a clash. Furthermore, countries may fire on a manned fighter plane, mistaking it for an armed drone, which could increase the likelihood of conflict (Sayler, 2015). Presently, approximately 35 states and four non-state actors have access to medium-sized armed drones with longer range, durability, and ability for payload than their hobbyist counterparts. Alarmingly, these weapons will not only be armed, but it will also be able to carry more advanced, releasable ammunition, which in effect will improve their ability to carry out targeted strikes. Whereas mid-size systems will be prone to small arms fire and air power, it is possible that the challenges of protecting against their unintended use will continue for some time to come. Compared to amateur drones, it is possible to use large numbers of these devices to strike and overtake bases or vessels, but at longer ranges at higher speeds and with greater payloads (newamerica.org, 2019).

Here are the lists of States with Armed Drones.

Table 4.1: Countries with Armed Drones

Country	Year	Description
United States	2001	The US conducted the country's first armed drone strikes in Afghanistan in 2001.
Israel	2004	Israel has never publicly acknowledged armed drone use, but reports of Israel's armed drone use are innumerable.
United Kingdom	2008	The UK purchased Reaper armed drones from the US in 2007 and armed them in 2008.
Iran	2010	Iran unveiled its first armed drone, the Karrar, on August 22, 2010, and continues production and use of UCAVs.
China	2011	Wing Loong I and Wing Long II was activated in 2011

North Korea	2011	The UAE purchased Wing Loong I armed drones from China in 2011 and Predator armed drones from the US in 2013.
North Korea	2012	ROK military sources reported the existence of explosive “suicide drones” converted from Raytheon Streaker target drones in 2012.
South Africa	2013	South African company Denel Dynamics tested an armed version of the Seeker 400 in 2013.
Switzerland	2014	In 2014 Switzerland announced the plan to buy six Hermes 900 HFE armed drones.
Italy	2015	In 2015, the US approved a longstanding request from Italy to arm its MQ-9 Reaper drones with missiles.
Nigeria	2015	A 2015 photo revealed a crashed Chinese-made CH-3 in Nigeria, indicating acquisition.
Spain	2015	In 2015, the US approved the sale of armed Reaper drones to Spain.
Pakistan	2015	Pakistan unveiled an armed version of its domestically produced Barraaq on September 7, 2015, with its first successful armed drone strike.
Iraq	2015	In late 2015, Iraq’s defense ministry released video footage of an armed Chinese armed drone taking flight from an Iraqi airfield.
Egypt	2015	Egypt has purchased Wing Loong and CH-4 UCAVS from China.
Georgia	2015	Georgia unveiled its first domestically produced armed drone in 2015, “Delta.”
Sweden	2015	The Swedish armed forces use three armed drones: a US Textron Shadow 200, the AeroVironment Puma, and the Wasp.
Greece	2016	Leased Heron(male) armed drone from Israel.
Kazakhstan	2016	In 2016, Kazakhstan purchased two Wing-Loong armed drones from China.
India	2016	In 2016, India’s Rustom II, a MALE combat drone, completed the first test flight. In 2019, India bought 50 Heron armed drone from Israel.
Ukraine	2016	On May 31, 2016, Ukraine successfully tested the indigenously developed Yatagan-2, which detonates on impact.
Turkey	2016	Turkey revealed its armed drone arsenal with a strike conducted in December 2016. While Turkey has imported

		surveillance drones from the US and Israel, Turkey's armed drones are indigenously developed.
Azerbaijan	2016	In 2016, footage emerged of an Israeli kamikazi armed drone flying over disputed Azerbaijani-Armenian territory, reportedly targeting a bus carrying Armenians.
Turkmenistan	2016	In November 2016, the Turkmenistan military displayed two Chinese-made WJ-600A/D UCAVs in a parade.
Saudi Arabia	2016	Saudi Arabia purchased a large quantity of China's Wing Loong II UCAVs in 2017 which will be added to the CH-4 drones in Saudi's arsenal.
France	2017	French Minister of the Armed Forces Florence Parly announced the long-awaited decision to arm French surveillance drones.
Poland	2017	In 2017, the Polish Ministry of Defense announced that 15 company's submitted bids to develop MALE UCAVs for Poland. Poland operates small munition UAVs.
Taiwan	2017	The armed NCSIST MALE UAV was unveiled in February 2017.
Belarus	2018	In 2018, Belarus showcased its new armed drones: the Yastreb and the Burevestnik-MB.
Belgium	2018	The US approved the sale of four MQ-9B SkyGuardians to Belgium.
Serbia	2018	In September 2018, Serbia announced its procurement of unmanned combat aerial vehicles from China.
Germany	2018	In June 2018, Germany's Bundestag Budget Committee approved the lease of armed drones from Israel.
Singapore	2019	The Republic of Singapore Air Force, in a now deleted image, showed the existence of an Israel Aerospace Industries Heron 1 MALE UAV in October 2019.
Russia	2019	The first images of the Okhotnik-B (Hunter) drone appeared on Jan. 23, 2019 on a Russian aviation website, but there is test video from November 2018.
Algeria	2019	Algeria tested the Chinese CH-4 UCAV in 2014. It now operated CH-3 and CH-4 UAVs. locally as the Algeria 54, and the Yabhon Flash-20 (Algeria 55).

Source: newamerica.org

Armed Drones and Non-State Actors

Non state actors are also striving to procure armed drones that might enhance their ability to gather intelligence and carry out attacks. Non state actors like Islamic State has released footage demonstrating the use of armed drones in Syria and Iraq for reconnaissance. (BBC, 2016) Colin Smith, cautioned in an interview with the Sunday Times that terrorists might potentially use small drones for assaults and propaganda purposes (The Sunday Times, 2015). Various non-state actors have found tactical use-cases for a variety of armed drone systems on and off the battlefield. To date, however, armed drones have not produced rapid and revolutionary change in contests between Non-State Actors and State parties. There are currently major limitations on the distance and length of time cheap, off-the-shelf armed drones can be flown, not to mention constraints on the weight of the objects they can carry. Indeed, these shortcomings are not lost on many of the user groups (Rossiter, 2018). Some militant groups have attempted to alleviate range and flight time limitations by augmenting existing systems with more powerful antenna or adding additional batteries to the vehicles. In Iraq War 3.0, Peter W. Singer observes, referring to recent anti-IS operations, ‘every single side in the war whether it’s the US, ISIS, Iraq, and Hezbollah is using armed drones. That’s the definition of the end of proliferation. That discussion is over; the technology has proliferated’ (Singer, 2016).

The deployment of armed drone systems by non-state actors in Syria and Iraq proved that they can confer offensive and defensive capabilities. ISIS’s modus operandi in terms of armed drone deployment proved their ability in curbing the opposing forces’ momentum, whether by inflicting casualties and/or disabling military hardware, thus causing the postponement or canceling of a potential military operation (Rossiter, 2018). Clarke argues Non-State Actors are highly adaptive and innovative and will

continue to find new ways to spread fear and chaos. It is imperative that counterterrorism specialists begin planning a robust response to the threat, not only in terms of detection and counter-measure technology, but also the training necessary to defend against attacks by weaponized drones. Over the long run, laws and policies governing drone use need to be developed before it's too late (Clarke, 2018).

Table 4.2: Non-State Actors with Armed Drones

Non-State Actors	Year	Description
Hezbollah	2004	A Lebanese militant group, was the first non-state actor known to deploy armed drones, launching a Mirsad 1 military-grade surveillance drone into Israeli airspace in November 2004.
Hamas	2016	The Palestinian group which rules the Gaza strip, has armed, Iranian-made Ababil drones. Hamas claims to have manufactured three types of drones themselves: surveillance, armed, and one to serve as a guided missile
Houthi Rebels	2017	The Iran-backed rebel group in Yemen, unveiled a new armed drone capability on January 30, 2017, when it struck a Saudi warship in the Red Sea with an armed unmanned maritime craft. This maritime armed drone strike killed two Saudi Navy sailors and injured three others.
ISIS	2017	The militant group headquartered in Syria and Iraq, announced in January 2017 the establishment of a formal armed drone unit “Unmanned Aircraft of the Mujahideen” that organizes unmanned aircraft campaigns on the battlefield.

Source: newamerica.org

The armed drones have become more and more available to both responsible and dangerous actors, considering the consequences of this long term strategic landscape and preparing for the challenges of a world of proliferated armed drones will be vital for the United States (Sayler, 2015). Comprehending the range of capabilities available to actors has implications not only for military operations and defense against armed drone attacks, but also for policy issues.

Conclusion

As use of armed drone technology is on rise, it is taking warfare from heroic warfare to post heroic warfare making modern warfare riskless and with its asymmetric advantage over the conventional weapons, armed drones carrying chemical or biological agents, practically any state or non-state actor will be increasingly within reach. Accordingly, in modern warfare, armed drones could bring about revolution in the world weapon system that could foster chaos and tension across the globe and even contribute to a shift in the balance of military power in the global security system (Gilli & Gilli, 2016). Although use of armed drones may not bring drastic change in the international scenario as radically as nuclear weapons and ballistic missiles proliferation did, but still armed drones could be used in a such way that might be devastating which may have horrendous result.

Chapter 5

Conclusion

This work has explored the ethical issues, and modern warfare-related challenges IHL faces with the use of armed drones. With the advent of the new millennium, the use of armed drones has seen a steady rise in the armed conflict and it has garnered a lot of attention across media, academia, humanitarian organizations and as well as among legal experts. Debates in and around the armed drones are mostly concentrated on the use of armed drones, issues related to accountability and transparency rather than the new technology armed drone itself.

The main issue related to an armed drone is not directly related to a weapon but it is related to its use. The use of armed drones in modern warfare in the targeted killing of the suspected terrorist has raised questions related to the use of an armed drone. The armed drone offers military superiority in modern warfare but it comes with several issues related to the ethical and legal aspects.

Glaucon has made an observation in Plato's 'The Republic'. He narrates the story of 'The Ring of Gyges' which is very much relevant to new technology in the 21st century. He narrates the story of a shepherd, named Gyges, (who worked for the King of Lydia) to explain the power of unrestrained liberty to pursue self-interest. One fine morning after few days of the earthquake, Gyges was visiting the place hit by the earthquake to understand the damage done by the earthquake in the process of inspection he discovers a golden ring in a chasm of earth. He wore the ring at a meeting of shepherds who reported monthly to the king on the state of his flocks. In one such meeting Gyges

happened to twist the ring on his finger, he became visible to his fellow mates, and he became visible again when he twisted the ring in the other direction. Soon afterward, blessed by the magical power of the ring to become invisible, he was able to enter the King's palace at night, seduce the queen to fulfill his fantasy, murder the king of Lydia and grab the throne of Lydia for himself (Bergen & Tiedemann, 2010). After having such a magical ring, Glaucon argues, a man could generally behave as if he had supernatural powers, and acting unjust manner would pay better than acting in a just manner. This new kind of technology which gave power of invisibility, although morally neutral became morally relevant once it was in the hands of a potential user who felt he could recreate the relationship that exists between justice and self-interest. Gages could have chosen not to wear the ring, or he could just have used in such a manner which could have yielded positive outcome in the society, but unjust action motivated by a desire to grab the throne of the king what would otherwise in the normal circumstances not have been possible. Absent in the prospect of being thwarted in the pursuit of self-interest in a manner that others would regard as unjust, the distinction between pursuing good purposes and pursuing bad purposes had become less meaningful. Technology, it could be argued, had opened the door for Gyges to forsake his virtue for the sake of profit. The magic ring achieved Gyges' goals more feasible, but it did not magically make his legitimate goals themselves or the violent means he chose to achieve them. Rather, Gyges' decision and actions alone attract moral and ethical scrutiny (Labossiere, 2009). Likewise, the mere fact that armed drone technology makes violence easier for and less risky to its unseen user is not to be confused with moral permission to engage in armed drone warfare (Enemark, 2014). While the academic landscape of armed drones remains largely divided between two groups, one which focuses the positive side of their use and other one who raise the red

flag regarding their moral implications on its ethical and legal aspect. Even though there is a rise in the use of armed drones in modern armed conflict, the academic landscape pertaining to armed drones widely remains under-researched.

As discussed in the chapter 2, the deployment of armed drones in large scale has resulted into having negative impact on military. Specially, with regard to the ethics of the combatants. While using armed drones there is only option of killing or postponing the attack. There is no option of surrender during the course of war when armed drone is being used.

Though armed drone's use has been successful in deterring or avoiding new recruits in terrorist groups but its use is yet to provide permanent solution to the menace of terrorism. It also has a negative impact on innocent civilians, causing thousands of deaths in war-torn countries. The motivation behind the advent of new military technologies should be to ensure the global security of basic human needs rather than the ill-wish of armed forces hegemony and supremacy in continuation to serving the financial benefits from the industries based on defense which is highly involved in the making of high end technological weapon systems and sale of these newly developed armaments. The use of armed drones should be moral so that it can be considered a 'humanitarian device'.

In modern warfare, the use of armed drones or any new technology cannot be stopped. Nevertheless, to ensure that the life of non-combatants is respected, every technology developed needs regulatory standards. At the end of the Second World War, the laws contained in International Humanitarian Law, rooted in the philosophy of Just War, were programmed to avoid the atrocities committed during those conflicts and to deter further humanitarian tragedies. Today more than ever, although the enemy is international terrorism, we are called upon to respect those rules.

Moreover, even if the use of armed drone is legal, do not constitute an act of war against any state, and are conducted with the consent of host states, they must follow certain humanitarian law principles. As discussed in the chapter 2 such principles present vigorous restraints over such use of armed drones. First, use of armed drones must be undertaken out of absolute military necessity that is, where recourse to armed drone attacks or the use of force must be the last available resort to reconcile an armed conflict. Second, to commence a kill list in armed drone attacks, targets must be combatants distinguished from the noncombatant civilian population in accordance with the principle of distinction under humanitarian law to avoid lawlessness and complete injustice. Third, armed drone attacks must be aligned with the principle of proportionality, by which civilians are protected against collateral damage (Qureshi, 2017). Fourth, the principle of unnecessary suffering prohibits the use of methods or means warfare which may be expected to cause unnecessary suffering or superfluous injury. The use of armed drones must be in concession with the principle of unnecessary suffering which is one of the core principles of IHL (ICRC, 1907).

Use of armed drones continues to raise serious questions about the numbers and nature of civilian casualties, but these questions stem primarily from the procedures for selecting targets and approving attacks, not from the nature and capabilities of armed drones themselves (Blank, 2012). As with any other weapon, it is essential to ensure that armed drone attacks are conducted in compliance with the basic principles of IHL only against legitimate military targets.

As Chapter 3 demonstrated, Just War Theory provides a lens through which many people across the globe interpret and discuss war. Just war ideas represent an intellectual middle ground residing between pacifism and militarism that justifies the occurrence of war while regulating its practice. Just war ideas are so enduring because

they are rooted in religion and morality, and echoed by politicians from all along the ideological spectrum. The interpretation and application of just war principles is often inconsistent due to differences in people's relation to a conflict. The legitimacy of war in the abstract, however, is rarely questioned. This universality of Just War Theory is important when analyzing any conflict, because it illuminates the rationale of each belligerent. Analyzing the historical development of Just War Theory provides context about how people arrived at present-day just war principles. Consideration is paid to the development of Just War Theory in the religious traditions to illustrate how different religions have independently cultivated scholarship and critical thought on this matter. Primary-source works from prominent Just War thinkers, such as Cicero, St. Augustine, and Thomas Aquinas, are referenced to understand just war history. This chapter also builds on the work of contemporary scholars such as David Kennedy and Michael Walzer, who have studied the relationship between law, war, and morality. Their broader ideas about justice and war are then applied specifically to armed drone strikes. The influence of Just War Theory on use of armed drones in modern warfare analyzing moral and ethical issues is also argued. While most people may not be versed in the language of Just War Theory, this chapter seeks to explain how just war ideas have shaped the way many conceive of war (Brunstetter & Braun, 2011).

The invention of weapon such as armed drones cannot be reversed. The risk of further proliferation of armed drones is much higher, specially, when one considers low production costs and rapid technological advancements. Moreover, neither a national nor international governing system is required to monopolies armed drone technology, as can be seen by organizations such as Amazon developing and operating their own models (BBC, 2016). Since it is unlikely for the development of armed drones to cease, the likelihood of counter-weapons being produced also rises. In the words of P. W.

Singer, 'The advent of armed drones into the battlefield just doesn't change how we fight, it changes for the first time the war at the most basic level. It transforms the very force of war, not just its power.' (Singer, 2009, p.194). Of course, warfare has constantly changed with the advancement of technology, but armed drone, Singer argues, mark a new shift insofar as they are a step toward semiautonomous machines taking the place of human warriors. If P. W. Singer is correct, then robotics will be the next revolution in military affairs, with advancements in armed drone technology leading the way (Melendez, 2017). Experts predict the eventual development of a fleet of armed drones forming expanding web-of-surveillance centers, capable of staying aloft for up to five years and providing rapid armed responses across the globe. The day in which armed drones entirely replace humans on the battlefield may be a long way off (if it ever comes), but armed drones have already attained, and will likely continue to gain, a vital role in military affairs (Brunstetter & Braun, 2011). As, demonstrated in the chapter 4, this could lead to a dead-end in terms of an international military arms race once again similar to Nuclear Weapons during the cold war era (Shane, 2011).

Recommendations

Firstly, the international community, specifically the UN, NGO's and civil society should continue to censure and discourage the manner in which the countries like U.S, U.K. and Israel are conducting its armed drone targeted killings.

Secondly, the international community should make sure if countries uses armed drones, they follow the basic principles of IHL.

Thirdly, the UN should demand the all countries which are using armed drones to be accountable to the international community by disclosing all information relating to its armed drone operations which in part remains undisclosed and cover (Heyns, Akande, Hill-Cawthor, & Chengeta, 2016).

Fourthly, State forces should provide sufficient information on the results of weapons to be used, the presence of civilians.

Fifthly, the non-lethal tactics for capture or incapacitation that must be attempted if feasible and the efforts must be made to minimize lethal force, including specifying the level of force that must be used at each stage.

Finally, In the urban areas which is densely populated, if it appears that a targeted killing will risk harm to innocent civilians (as has been the case in many attacks), State forces must provide effective advance warning, as specifically as possible, to the population (Alston, 2010, p.29).

Limitations and Prospect for Future Research

There are a few limitations to this research. Firstly, this research to a great extent is dependent on the secondary sources as a result, data/information from the primary source has been used in the very less quantity. Secondly, due to the paucity of time while pursuing M.Phil. and unavailability of a fund in particular this field study could not be conducted as the area where the armed drone is being used lies in countries like Pakistan, Afghanistan and so on. Thirdly, lack of transparency in armed drone strikes and unavailability of all relevant data/information from the countries which use armed drones has also paused a stop in this research work. Further studies can be conducted on a similar topic availing proper funding so that field studies can be conducted to understand the real issues/data from the victims themselves which will help to understand ethical and legal issues in a comparative plane.

Bibliography

- Akins, H. (2017, March). *Lawnmowers in the Sky: The Turbulent Past*. Knoxville, Tennessee.
- Alexander, D. (2013, January 7). Retired general cautions against overuse of "hated" drones. Washington, US.
- Alston, P. (2010). *Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions*. New York: United Nations General Assembly, Human Rights Council.
- Aquinas, T. (1920). *Summa Theologiae*. (F. o. Province, Trans.) Retrieved on July 12, 2019, from <http://www.newadvent.org/summa/index.html>.
- Attuquayefio, P. (2014). Drones The US and the New Wars in Africa. *Contemporary Voices*, 5(3), 3-11
- Bangar, A. (2017). *Statelessness in India* . Maastricht : Institute on Statelessness and Inclusion .
- BBC. (2016, December 14). Amazon makes first drone delivery. London.
- BBC. (2016, January 11). Warning over drones use by terrorists. London.
- Betts, R. K. (1995-6). What will it take to deter the US? *Parameters*, 76.
- Bergen, P., & Tiedemann, K. (2010, April 23). *The Year of the Drone*. London, UK. Retrieved on January 12, 2020, from <https://foreignpolicy.com/2010/04/23/the-year- of-the-drone/>
- Bianchi, A., & Hayim, D. O. (2013). Unmanned Warfare Devices and the Laws of War: The Challenge of Regulation. *SSRN*, 31(2), 93-98.
- Blair, D. (2011, August 14). Drones Alone are not the Answer. Mechanicsburg, US.
- Blank, L. R. (2012). After "Top Gun": How Drone Strikes Impact The Law of War. *University of Pennsylvania Journal of International Law*, Vol. 33(2): 675-718.

- Bohrer, Z., & Osiel, M. (2013). Proportionality in Military Force at War's Multiple Levels: Averting Civilian Casualties vs. Safeguarding Soldiers. *Vanderbilt Journal of Transnational Law*, 46, 747-821.
- Booth, K. (2015). *Realism and World Politics*. Abingdon: Routledge.
- Botelho, N. R. (2013, April 12). Ex-Pakistani President Musharraf admits secret deal with US on drone strikes. Atlanta, US. Retrieved on August 10, 2019, from <https://edition.cnn.com/2013/04/11/world/asia/pakistan-musharraf-drones/index.html>
- Bowden, M. (2013, September). The Killing Machines: How to think about drones. Boston, US. Retrieved on July 21, 2019, from <https://www.theatlantic.com/magazine/archive/2013/09/the-killing-machines-how-to-think-about-drones/309434/>
- Boyle, M. J. (2013). The costs and consequences of drone warfare. *Royal Institute of International Affairs*, 89 (1), 1-29.
- Boyle, M. J. (2015). The legal and ethical implications of drone warfare. *The International Journal of Human Rights*, 19 (2), 105-126.
- Brooks, R. (2014). Drones and the International Rule of Law. *Carnegie Council for Ethics in International Affairs*, 28 (1), 83-103.
- Bruke, A. (2007). *Beyond Security, Ethics and Violence: War against the Other*. London: Routledge.
- Brunstetter, D., & Braun, M. (2011). The Implications of Drones on the Just War Tradition. *Ethics & International Affairs*, 25 (3), 337-358.
- Byman, D. (2013). Why Drones Work? The Case for Washington's Weapon of Choice. *Foreign Affairs*.
- Byman, D. L. (2003). *Are We Winning the War on Terrorism?* Washington: Brookings.

- Carter, A. J. (2009). Just/New War Theory: Non-State Actors in Asymmetric Conflicts. *Philosophy in the Contemporary World*, 16 (2), 1-7.
- Carvin, S. (2015). Getting Drones Wrong. *The International Journal of Human Rights*, Vol. 19 (2): 127-141.
- Chacma, B. (2011). *The Politics of Nuclear Weapons in South Asia*. London: Asghate.
- Chamayou, G. (2015). *Drone Theory*. London: Penguin.
- Cheema, Z. I. (2010). *Indian Nuclear Deterrence: Its Evolution, Development and Implications for South Asian Security*. Oxford: Oxford University Press.
- Chehtman, A. (2017). The ad bellum Challenge of Drones: Recalibrating Permissible Use of Force. *The European Journal of International Law*, 28 (1), 173-197.
- Choudhury, S. (2016). *Women and Conflict in India*. London: Routledge.
- Clarke, C. P. (2018, August 20). Drone terrorism is now a reality, and we need a plan to counter the threat. Davos.
- Clegg, M. (2012). Force Protection and Society. *Defense and Strategic Analysis*, Vol. 28 (2): 131-139.
- Coker, C. (2001). *Humane Warfare*. London: Routledge.
- Coleman, D. G., & SiracUS, J. M. (2006). *Real-World Nuclear Deterrence: The Making of International Strategy*. Westport: Praeger.
- Crawford, G. A. (2008). *Manhunting: Reversing the Polarity of Warfare*. Maryland: Publish America Press,.
- Crook, J. R. (2010). State Department Legal Adviser Describes US Approach to International Law. *The American Journal of International Law*, 104 (2), 271-278.

- Davis, L. E., McNerney, M. J., & Gr, M. D. (2016). *Clarifying the Rules for Targeted Killing: An Analytical Framework for Policies Involving Long-Range Armed Drones*. Santa Monica: Rand Corporation.
- Dellavalle , S. (2011). Dalla comunità particolare all'ordine universale. *paradigmi storici*.
- Department of Defense . (2013, march 28). *United States Department of Defense Fiscal Year 2014 Budget Request*. Retrieved from comptroller.defense: https://comptroller.defense.gov/Portals/45/documents/defbudget/fy2014/FY2014_Budget_Request_Overview_Book.pdf
- Donovan, C. (2007). A top-down approach . In M. Bevir, *Encyclopedia of governance* (pp. 971-972). CA: Sage Publications.
- Eagleton, C. (1938). The Form and Function of the Declaration of War. *The American Journal of International Law*, 32 (1), 19-35.
- ECCHR. (2017). *Litigating Drone Strikes Challenging the Global Network of Remote Killing*. Berlin: ECCHR Press.
- Enemark, C. (2014). *Armed Drones and the Ethics of War: Military Virtue in a Post-heoric age*. Abingdon: Routledge.
- Fixdal, M., & Smith, D. (1998). Humanitarian Intervention and Just War. *Mershon International Studies Review*, 43, 283-312.
- Freiberger, E. (2013, July 18). *Just War Theory and the Ethics of Drone Warfare*. Retrieved on April, 10, 2019 from <https://www.e-ir.info/2013/07/18/just-war-theory-and-the-ethics-of-drone-warfare/>
- Friberger, E. (2013, July 18). Just War Theory and the Ethics of Drone Warfare.
- Frowe, H. (2016). *The Ethics of War and Peace*. New York: Routledge .
- Gerstein, J. (2011, July 29). Dennis Blair Rips Obama White House. Virgini, US.

- Gill , T. D., & Fleck, D. (2010). *The Handbook of the International Law of Military Operations*. Oxford: Oxford University Press.
- Gill, N. (2013, November 10). www.fandm.edu/uploads/files/610047061882135044-junto-1314-gill-original.pdf. Retrieved on September 10, 2019, from <https://www.fandm.edu:https://www.fandm.edu/uploads/files/610047061882135044-junto-1314-gill-original.pdf>
- Gilli , A., & Gilli, M. (2016, May 19). Why Concerns over Drone Proliferation are overblown. Washington .
- Goose, S. D. (2016). The Growing International Movement Against Killer Robots. *Havard International Review*, 28-33.
- Gray, C. (2010). Moral Advantage, Strategic Advantage? *Journal of Strategic Studies*, 33 (3), 333-365.
- Greene, O. &. (2012). *Small Arms, Crime and Conflict*. Abingdon : Routledge.
- Greenhood, C. (2003). The Law of War. In M. D. Evans, *International Law* (p. 791). Oxford: Oxford university Press.
- Greenwood, C. (2003). The Law Of War (International Humanitarian Law). In M. D. Evans, *International Law* (pp. 789-822). New York: Oxford University Press.
- Grimmett, R. F. (2007). *Authorization For Use Of Military Force in Response to the 9/11 Attacks (P.L. 107-40): Legislative History*. Washington : Library of Congress.
- Gunaratne, P. R. (2013). US Drone Strikes and their Impact on International Security in a Post 9/11 World. *Journal of the Royal Asiatic Society of Sri Lanka*,, 58 (2), 73-93.
- Gusterson, H. (2019). Drone Warfare in Waziristan and the New Military Humanism. *Current Anthropology* , 60 (S19), S77-S86.

- Haider, E. (2014, August). Drones: choosing between droning on and understanding. Islamabad, Pakistan. Retrieved on October 25, 2019 from <https://www.dawn.com/in-depth/unfair-advantage-of-death-and-drones/>
- Hallgarth, M. W. (2013). Just War Theory and Remote Military Technology: A Primer. In B. J. Strawser, *Killing by Remote Control: The Ethics of an Unmanned Military* (p. 26). London: Oxford Scholarship Online.
- Hambling, D. (2016). Drone swarms will change the face of modern warfare. UK. Retrieved on August 10, 2019, from <http://www.wired.co.uk/article/drone-swarms-change-warfare>
- Hashmi, S. (2012). *Just Wars, Holy Wars, and Jihads: Christian, Jewish, and Muslim Encounters and Exchanges*. Cary: Oxford University Press.
- Heatherly, M. C. (2014). Drones: The American Controversy. *Journal of Strategic Security*, 7 (4), 25-37.
- Heyns, C., Akande, D., Hill-Cawthor, L., & Chengeta, T. (2016). The International Law Framework Regulating the Use of Armed Drones. *International and Comparative law Quarterly*, 65 (4), 791-827.
- Hobbes, T. (1642). *De Cive*. London: Royston.
- Horowitz, M. C. (2016). Separating Fact from Fiction in the Debate Over Drone Proliferation. *International Security*, 41(2), 7-42.
- House, P. W. (2018, November 30). A way to rein in drone proliferation. Chicago, US.
- Husian, I. (2010, January 9). Howling at Moon. Islamabad, Pakistan.
- ICJ. (1996). *Legality of the Threat or Use of Nuclear Weapons*. Geneva: ICJ. Retrieved on August 25, 2019, from <https://www.icj-cij.org/files/case-related/95/095-19960708-ADV-01-00-EN.pdf>

- ICRC. (1907, October 18). *Treaties, States Parties and Commentaries*. Retrieved on July 2, 2019 from [ihl-databases.icrc.org: https://ihl-databases.icrc.org/ihl/WebART/195-200033?OpenDocument](https://ihl-databases.icrc.org/ihl/WebART/195-200033?OpenDocument)
- ICRC. (1977, June 8). *Treaties, States Parties and Commentaries*. Retrieved on March 21, 2019, from [ihl-databases.icrc.org:https://ihl-databases.icrc.org/ihl/WebART/470750044?OpenDocument](https://ihl-databases.icrc.org/ihl/WebART/470750044?OpenDocument)
- ICRC. (1977, June 8). *Protection of the Civilian Population*. Geneva, Switzerland.
- ICRC. (2019, september 14). *Customary IHL*. Retrieved from Inter on April, 12, 2019 national Committee of the Red Cross: https://ihl-databases.icrc.org/customary-ihl/eng/docs/v2_rul_rule14
- ICRC. (2019, September 16). *International Committee of the Red Cross*. Retrieved on June 21, 2019 from Customary Law: https://ihl-databases.icrc.org/customary-ihl/eng/docs/v2_rul_rule71
- Ignatieff, M. (2001). Ethics and the New War. *Canadian Military journal*, 5-10.
- Jha, U. (2014). *Drone Wars: Ethical, Legal and Strategic Implications*. New Delhi: KW Publishers.
- Jha, U. (2017). *Killer Robots: Lethal Autonomous Weapon Systems Legal, Ethical and Moral*. New Delhi: K W Publishers Pvt Ltd.
- Jha, U. (2019, November 05). Talk with Wing Commander on Armed Drones. (K. Sharma, Interviewer)
- Jones, S. G., & Libicki, M. C. (2008). *How Terrorist Groups End*. California: Rand Corporation.
- Johnson, J. T. (1981). *Just War Tradition and the Restraint of War: A Moral and Historical Inquiry, Princeton*. Princeton: Princeton University Press.
- Jonshon, J. T. (2005, January). *Just War, As It Was and Is*. New York, US.

- Joseph, M. &. (2005). *Small Arms and the Security Debate in South Asia*. . New Delhi: Manohar.
- Kaag, J. &. (2014). *Drone Warfare*. . Cambridge : Polity Press.
- Kaempf, S. (2014). Postheroic US Warfare and the Moral Justification for Killing in War. In &. A. C. E. Gentry, *The Future of Just War* (pp. 77-97). Athens: University of Georgia Press.
- Kahn, W. P. (2002). The Paradox of Riskless Warfare. *Philosophy and Public Policy Quarterly*, 22(3), 1-8.
- Kaye, D. (2013). International Law Issues in the Department of Justice White Paper on Targeted Killing. *American Society of International Law*, 17(8).
- Keene, D. S. (2015). *Lethal and Legal? The Ethics of Drone Strikes*. Pennsylvania: Strategic Studies Institute and US Army War College Press.
- Kelsay, J. (2006). Islamic Tradition and the Justice of War. In T. Brekke, *The Ethics of War in Asian Civilizations: A comparative perspective* (p. 103). London: Routledge.
- Kennedy, D. (2006). Reassessing International Humanitarianism: The Dark Sides . *Reassessing International Humanitarianism: The Dark Sides*. Havard University Press.
- Kenneth, R. (2015). *Drones and the Ethics of Targeted Killing*. Boston: Rowman & Littlefield Publishers.
- Khan, A. (2009, March 10). Drone Attacks Continue. Islamabad, Pakistan.
- Kierulf, J. (2017). *Disarmament under International Law*. Chicago: McGill-Queen's University Press.
- Kilby, J. (2007). *Violence and the Cultural Politics of Trauma*. Edinburgh: Edinburgh University Press.

- Killmister, S. (2008). Remote Weaponry: The Ethical Implications. *Journal of Applied Philosophy*, 25 (2), 121-133.
- Kohn, S. (2015, December 9). Drone Strikes are Creating Hatred towards America that Will Last for Generations.
- Kretzmer, D. (2005). Targeted Killing of Suspected Terrorists: Extra-Judicial Executions or Legitimate Means of Defence? *The European Journal of International Law*, 16 (2), 171-212.
- Kumar, A. (2018, August 2). To what end this exercise? New Delhi, India.
- Labossiere, M. (2009, December 29). Summary of Plato's Ring of Gyges. London, UK. Retrieved on January 12, 2020, from <https://aphilosopher.drmcl.com/2009/12/29/summary-of-platos-ring-of-gyges/>
- LaFranchi, H. (2013, June 3). American Public Has Few Qualms with Drone Strikes, Poll Finds. US. Retrieved on September 1, 2019, from <https://www.csmonitor.com/US/Military/2013/0603/American-public-has-few-qualms-with-drone-strikes-poll-finds>
- Lango, J. W. (2014). Just War Theory: A Cosmopolitan Just War Theory. In J. W. Lango, *The Ethics Of Armed Conflict* (pp. 18-47). Edinburg: Edinburg University Press.
- Lango, J. W. (2014). *The Ethics of Armed Conflict: A Cosmopoliton Just War Theory*. Edinburgh: Edinburgh university Press.
- Larsen, J. A. (2009). *Arms Control and Cooperative Security*. Boulder: Lynne Rienner.
- Lederach, J.P., & Maiese, M. (2003). *Conflict Transformation* Retrieved on November 23, 2019, from www.peacebuildingforlanguagelearners.pbworks.com:http://www.peacebuildi

ngforlanguagelearners.pbworks.com/w/file/fetch/73426925/Lederach%20and%20Maiese_Conflict%20Transformation.pdf

- Lewis, L., & Vavrichek, D. M. (2016). *Rethinking the Drone war*. Quantico: Marine Corps University Press.
- Lewis, M. W. (2012). Drones and the Boundaries of the Battlefield. *Texas International Law Journal*, 49, 299-300.
- Linden, H. v. (2015). Drone Warfare and Just War Theory. In M. Cohn, *Drones and Targeted Killing: Legal Moral, and Geopolitical Issues* (pp. 171-172). Northampton: Olive Branch Press.
- Lushenko, P. (2015). *Counter Terrorist Trends and Analyses*,). Reconsidering the Theory and Practice of High Value Targeting, 7(7), 23-30.
- Luttwak, E. N. (1995). Toward Post-Heoric Warfare. *Foriegn Affairs*, 74(3), 109-122.
- Ma, V. (2016). The Ethics and Implications of Modern Warfare: Robotic Systems and Human Optimization. *Harvard International Review*, 37(4), 43-45.
- Mahneken, T. (2008). *Technology and the American Way of War since 1945*, New York, Columbia. New York: Columbia University Press.
- Manjikian, M. (2017). *A Typology of Arguements About Drone Ethics*. Carlise: US Army College Press.
- Margolis, J. (2005). Terrorism and the New Forms of War. In J. M. Tom Rockmore, *The Philosophical challenge of September 11: Terrorism and the New Forms of War*. Blackwell Publishing.
- Martinic, G. (2016, March 6). Explosion in use of unmanned weapons and surveillance systems. Canberra, Australia.
- McCrisken, T. (2013). Obama's Drone War. *Survival*, 55(2), 97-122.
- McNair., A. D. (1948). *Legal Effects of War*. New York: Cambridge University Press.

- Melendez, S. (2017, December 12). *The Rise Of The Robots: What The Future Holds For The World's Armies*. Washington.
- Melzer, N. (2009). *Targeted Killing in International Law*. Oxford: Oxford University Press.
- Melzer, N. (2010). Keeping the Balance Between Military necessity and Humanity: A Response to Four Critiques of ICRC'S Interpretive Guidance on the Notion of Direct Participation in Hostilities. *International Law and Politics*, 42, 833-913.
- Mendoza, J. (2010, August 24). *5 Inventions You Won't Believe Came From War*. Retrieved on May 11, 2019, from [www.cracked.com:https://www.cracked.com/article_18703_5-inventions-you-wont-believe-came-from-war_p2.html](https://www.cracked.com/article_18703_5-inventions-you-wont-believe-came-from-war_p2.html)
- Miller, S. (2014). The Ethics of Targeted Killing: Osama Bin Laden, Drones, and Counter-Terrorism. *Public Affairs Quarterly*, 28(4), 317-340.
- Nakamura, R. T. (1987). The textbook policy process and implementation. *Policy Research Studies*, 142-154.
- Nauman, Q. (2012, June 03). Pakistan condemns US drone strikes. Islamabad, Pakistan. [newamerica.org](http://www.newamerica.org). (2019, November 4). *Non-State Actors with Drone Capabilities*. Retrieved from <https://www.newamerica.org/in-depth/world-of-drones/3-who-has-what-countries-armed-drones/>
- [newamerica.org](http://www.newamerica.org). (2019, November 2). *Who Has What: Countries with Armed Drones*. Retrieved from <https://www.newamerica.org/international-security/reports/world-drones/non-state-actors-with-drone-capabilities/>
- ohchr. (2013). *United Nations Special Rapporteur on Extrajudicial, Summary/Arbitrary Executions*. ohchr. Retrieved on September 6, 2019, from

https://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session26/Documents/A_HRC_26_36_Add.1_ENG.DOC

- Paracha, N. F. (2011, May 28). Drone attacks: The truth is out. Islamabad, Country. Retrieved on November 12, 2019, from <https://www.dawn.com/news/624489/drone-attacks-the-truth-is-out>
- Peron, A. E. (2014). The Surgical Legitimacy of Drone Strikes? Issues of Sovereignty and Human Rights in the Use of Unmanned Aerial Systems in Pakistan. *Journal of Strategic Security*, 7(4), 81-93.
- Peter Singer, M. H. (2016). *The Drone Revolution Revisited*. New York: Center for the Study of the Drone.
- Pew Research Centre. (2010). *Pew Research Global Attitudes Project, Concern about Extremist Threat Slips in Pakistan*. Washington: Pew Research Centre.
- Pew Research Centre. (2013). Global Opinion of Obama Slips, International Policies Faulted. Washington, D.C., US.
- Pufendorf, S. V. (1682). *The Two Books on the Duty of Man and Citizen According to Natural Law*. New York: Oceana Publications Inc.
- Pugliese, J. (2013). *State Violence and the Execution of Law: Biopolitical Caesurae of Torture, Black Sites, Drones (Law and the Postcolonial)*. Sydney: Routledge.
- Pulzl, H., & Treib, O. (2006). *Handbook of public policy analysis*. London: Routledge.
- Qureshi, W. A. (2017). The Legality and Conduct of Drone Attacks. *Notre Dam Journal of International Comparative Law*, 7(2), 91-105.
- Rae, J. D. (2014). *nalyzing the Drone Debates: targeted killing, remote warfare, and military technology*. London: Palgrave Macmillan.
- Raghavan, S. (2012, May 29). In Yemen, US Airstrikes Breed Anger, and Sympathy for Al-Qaeda. Aden, Yemen.

- Reichberg, G. M. (2010). Thomas Aquinas Between Just War and Pacifism. *The Journal of Religious Ethics*, 38(2), 238.
- Reisman, W. M. (1984). Article 2(4): The Use of Force in Contemporary International Law. *American Society of International Law* (pp. 74-87). Cambridge University Press.
- Rhodes, R. (2012). *The Making of the Atomic Bomb*. New York: Simon & Schuster.
- Robert, D. (2008). *Human Insecurity*. New York: Zed Books Ltd.
- Rodin, D. (2006). The Ethics of Asymmetric War. In R. Sorabji, & d. Rodin, *The Ethics of War: Shared Problems in Different Traditions* (p. 153). Aldershot: Ashgate.
- Rogers, P. (2010). *Losing Control*. London: Pluto Press.
- Rosén, F. (2014). Extremely Stealthy and Incredibly Close: Drones, Control and Legal Responsibility. *Journal of Conflict and Security Law*, 19(1), 113-131.
- Rossiter, A. (2018). Drone usage by Militant Groups: Exploring Variation in Adoption. *Defense and Security Analysis*, 34(2), 113-126.
- Ryan, V. J. (2010). Drone Warfare and the Law of Armed Conflict. *Denver Journal of International Law and Policy*, 39(1), 110.
- Sayler, K. (2015). *Proliferated Drones: A Technology Primer*. New York: CNAS.
- Scahill, J. (2013). *Dirty Wars: The World Is A Battlefield*. New York: Nation Books.
- Scharre, P. (2014). *Robotics on the Battale field Part II: The Coming Swarm*. Washington DC: CNAS.
- Schmitt, M. N. (2011). Drone Attacks under the Jus ad Bellum and Jus in Bello: Clearing the Fog of Law. *Yearbook of International Humanitarian Law*, 311-326.
- Sehrawat, V. (2017). Legal Status of Drones Under LOAC and International Law. . *Penn State Journal of Law & International Affairs*, Vol. 5 (1): 165-205.

- Shane, S. (2011, October 8). Coming Soon: The Drone Arms Race. *The New York Times*, Retrieved on September 9, 2019, from <https://www.nytimes.com/2011/10/09/sunday-review/coming-soon-the-drone-arms-race.html>
- Shane, S. (2012, september 29). Yemen's Leader Praises US Drone Strikes. New York, US. Retrieved on May 6, 2019, from <https://www.nytimes.com/2012/09/29/world/middleeast/yemens-leader-president-hadi-praises-us-drone-strikes.html?>
- Singh, R. (2013, July 22). A Meta-Study of Drone Strike Casualties. Washington D.C, US.
- Skerker, M. (2004). Just war criteria and the new face of war: Human shields, manufactured martyrs, and little boys with stones. *Journal of Military Ethics*, 3(1), 27-39.
- Solis, G. D. (2010). *The Law of Armed Conflict: International Humanitarian Law in War*. New York: Cambridge University Press.
- Somaiya, R. (2013, January 30). Drone Strike Prompts Suit, Raising Fears for U.S Allies. New York, US. Retrieved August 22, 2019, from www.nytimes.com/2013/01/31/world/drone-strike-lawsuit-raises-concerns-on-intelligence-sharing.html.
- Sparrow, R., & Lucas, G. (2016). When Robots Rule the Waves? *Naval War College Review*, 69(4), 49-78.
- Springer, P. J. (2013). *Military Robots and Drone*. California: ABC-CLIO.
- Steiner, H. J. (2003). International protection of Human Rights. In M. d. Evans, *International Law* (pp. 757-784). New York: Oxford University Press.

- Stohl, R. (2015, April 20). All the President's Drones: Obama's Targeted-Killing Problem. Washington, US.
- Strawser, B. (2012, August 6). The morality of drone warfare revisited. *The morality of drone warfare revisited*. London, UK. Retrieved on August 12, 2019, from <https://www.theguardian.com/commentisfree/2012/aug/06/morality-drone-warfare-revisited>
- Strawser, B. J. (2010). Moral predators: the duty to employ unhabited aerial vehicles. *Journal of Military Ethics*, 9(1), 342-68.
- Strickland, J. (2010, August 30). *Do wars drive technological advancement?* Retrieved on July 10, 2019, from <https://science.howstuffworks.com/war-drive-technological-advancement.html>
- The Bureau of Investigative Journalism. (2013, December 18). Get the Data: Drone Wars. London, U.K.
- The Economic Times. (2013, October 23). End drone attacks in Pakistan: PM Nawaz Sharif tells US. Retrived on July 18, 2019 from <https://economictimes.indiatimes.com/news/politics-and-nation/end-drone-attacks-in-pakistan-pm-nawaz-sharif-tells-us/articleshow/24560249.cms>
- The New York Times. (2012, November 24). Election Spurred a Move to Codify US Drone Policy. Retrived on June 6, 2019, from <https://www.democraticunderground.com/1178673>
- The New York Times. (2013, May 23). Obama's Speech on Drone Policy. Retrived on Febraury 11, 2019, from <https://www.nytimes.com/2013/05/24/us/politics/transcript-of-obamas-speech-on-drone-policy.html>

- The Sunday Times. (2015, December 06). Police fear drone attack on airliner. Retrived on November 16, 2019, from <https://www.thetimes.co.uk/article/police-fear-drone-attack-on-airliner-tbw65hc6z>
- The Wall Street Journal. (2010, January 9). The Drone Wars. Retrived on May 20, 2019, from <https://www.wsj.com/articles/SB10001424052748704130904574644632368664254>
- Toscano, C. P. (2015). Friend of Humans: An Argument for Developing Autonomous Weapons Systems. *Journal of National Security and Law Policy*, 8(1), 1-82.
- UNIDIR. (2014). *The Weaponization of Increasingly Autonomous Technologies: Considering how Meaningful Human Control might move the discussion forward*. Geneva: UNIDIR.
- UNIDIR. (2018). *Weapons of choice?The expanding development, transfer and use of armed UAVs*. Geneva: UNIDIR.
- UNODA. (2015). *Study on Armed Unmanned Aerial Vechicles*. New York: UNODA.
- Valls, A. (2000). Can terrorism be Justified? In A. Valls, *Ethics in International Affairs: Theory and Cases* (pp. 65-68). Maryland: Rowman & Littlefield Publishers.
- Vogel, R. J. (2011). Drone Warfare and the Law of Armed Conflict. *Denver Journal of International Law and Policy*. *Denver Journal of International Law and Policy*, 39(1), 101.
- Wagner, M. (2012). Beyond the Drone Debate: Autonomy in Tomorrow's Battlespace. *Proceedings of the ASIL Annual Meeting*, 106, 80-84.
- Walsh , J. I., & Schulzke, M. (2016). *The Ethics of Drone Strikes: Does Reducing the Cost of Conflict Encourage War?* Washington: Army War College Press.

- Walzer, M. (2002). The triumph of Just War Theory (and the Dangers of Success).
International War crimes, Terrorism and Justice, 69 (4), 925-944.
- Walzer, M. (2003). *Arguing about war*. New Haven: Yale university Press.
- Walzer, M. (2006). *Just and Unjust Wars: A Moral Agruement with Historical Illustrations*. New York: Basic Books.
- Wertheimer, R. (2010). *Empowering Our Military Conscience: Transforming Just War Theory and*. New York: Routledge.
- Williams, B. (2013). *Predators: The CIA's Drone War on Al Qaeda*. Washington: Potomac.
- Wolfendale, J. (2011). *New Wars and New Soldiers: Military Ethics in the Contemporary World*, Surrey: Ashgate Publishing Limited.
- Wright, E. A. (2015). "Of Drones and Justice: A Just War Theory Analysis of the United States' Drone Campaigns". Retrieved on October 12, 2019, from https://digitalcommons.ursinus.edu/cgi/viewcontent.cgi?article=1003&context=ethics_essay
- Zenko, M., & Kreps, S. (2014). *Limiting Armed Drone Proliferation*. New York: Council on Foreign Relations Press.