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Lazarus Ejike Onuh

Providence College, lonuh@friars.providence.edu

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THE SOUL OF THE DRONE OPERATOR:
THE PLACE OF THE CARDINAL VIRTUES IN DRONE WARFARE

A Master's Thesis Presented to the Faculty of the Department of Theology
Providence College

In Partial Fulfillment of the Requirements for the Degree of
Master of Arts in Theology

By Lazarus Ejike Onuh
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Under the Direction of
Robert Barry, Ph.D.

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LIST OF ABBREVIATIONS

AD	Anno Domini (Year of our Lord)
API	Protocol Additional to the Geneva Convention
ASS	Autonomous Strike System
BBC	British Broadcasting Corporation
CCC	Catechism of the Catholic Church
CIA	Central Intelligence Agency
CNN	Cable News Network
GPS	Global Positioning System
GS	Gaudium et Spes
IAI	Israeli Aircraft Industries
ISIS	Islamic State of Iraq and Syria
ISR	Intelligence, Surveillance and Reconnaissance
NYU	New York University
PTSD	Post Traumatic Stress Disorder
U.K.	United Kingdom
U.N.	United Nations
U.S.	United States
UAS	Unmanned Aircraft Systems
UAV	Unmanned Aerial Vehicles
USCCB	United States Conference of Catholic Bishops

INTRODUCTION

Prior to the emergence of the terrorist group Boko Haram in the northern part of Nigeria, Nigeria was a country where people lived in relative peace. Founded in 2002 with the official Arabic name *Jama'atu Ahlis Sunna Lidda'awati wal-Jihad*, which means "People Committed to the Propagation of the Prophet's Teachings and Jihad", Boko Haram's initial main focus was on simply opposing the western system of education. However, by 2009, it had launched a military operation intent on creating an Islamic State.¹ As this terrorist group gradually infiltrated the country, things began to gradually change; Nigeria began to occupy major headlines in the world media for the wrong reasons. The hope of all was that "this too shall pass away" like every other challenge in the past. However, as time went on, it became clear that the Boko Haram saga was not a passing phenomenon and that it will not quickly lose its taste for violence and evils of various kinds. In no time, bombings in churches, markets, police stations, mosques and military sites became almost a weekly occurrence.²

Since terrorism had up until this point been an extremely rare occurrence in Nigeria, it is of little wonder that when the Boko Haram insurgency began to acquire greater dimensions, the Nigerian Military could not immediately contain its activities. The terrorist group, therefore, began to have an almost unhindered field day. No longer were they merely terrorists planting bombs, they had metamorphosed into a kidnaping and abduction machine. On the night of April 14, 2014, it was reported that over 200 girls had been kidnapped in Chibok, a town in Borno State, Nigeria.³

The alleged abduction of these innocent girls, whose only fault was that they availed themselves of the opportunity to acquire western education, was interpreted as a loud statement from Boko Haram that they were bent on evil and, more importantly, they were capable of carrying out crimes of various dimensions. This brutish act would trigger a global outrage that would culminate in

¹ Farouk Chothia: BBC Africa, 4 May 2015

² Kevin Uhrmacher and Mary Beth Sheridan: The brutal toll of Boko Haram's attacks on civilians, The Washington Post, April 3, 2016 (<https://www.washingtonpost.com/graphics/world/nigeria-boko-haram/>)

³ BBC News: Nigeria abductions, Timeline of events, 12 May 2014 (<http://www.bbc.com/news/world-africa-27342757>)

the Bring Back Our Girls hashtag (#Bring Back Our Girls). Consequently, the Nigerian government had to launch a national search for the alleged missing girls.

However, every attempt at locating the victims or of overpowering the group itself was futile. Over time, Boko Haram had captured a huge forest where they established their base of terror. Their operations from Sambisa forest lent credence to the mystery and audacity of their operations. Their reputation and the fear they inspired continued to grow as the vastness of the forest made it more and more difficult to locate them. From then on, they began to unleash significant amount of violence strategically calculated to cause maximum disruption to the lives of the Nigerian people. The failure to locate and rescue the girls ushered in a plea for a more sophisticated military system that would safely aid the government in locating and dismantling Boko Haram strongholds in remote parts of Nigeria. More precisely, the Federal Government of Nigeria requested drones from the international community.⁴

Drones are remotely operated unmanned aircrafts either controlled by ‘pilots’ from the ground or, increasingly, autonomously following a pre-programmed mission. Drones have come to be identified with various acronyms and labels such as Unmanned Aircraft Systems (UAS), Unmanned Aerial Vehicles (UAV) and Autonomous Strike System (ASS). There are different uses of UAVs ranging from civilian to military, weaponized to non-weaponized. This works refers specifically to weaponized military UAVs.

Advocates of drones tout several military advantages. Drones remove the humans who operate them completely from harm’s way. Drones are not prone to frustration, boredom and exhaustion; and can remain at the same alert level for an indefinite amount of time. They can also endure certain unfavorable conditions that humans cannot withstand.

Despite the much-advertised advantages of drones, there are critics of drone use in the fight

⁴ Colin Freeman, The Telegraph: Calls grow for West to use drones to hunt for Nigerian girls as Boko Haram threatens to ‘marry off’ nine-year-old, May 5, 2014
<http://news.nationalpost.com/news/calls-grow-for-west-to-use-drones-to-hunt-for-nigerian-girls-as-boko-haram-threatens-to-marry-off-nine-year-olds>

against terrorism or in any kind of warfare at all. These critics are quick to point out that in most parts of the world where drones have been used to fight wars and terrorists, great harm has been caused to the civilian population. Countries like Pakistan, Afghanistan, Iraq and even Libya are still suffering the aftermath of drone wars. Those with religious leanings contend that drone wars make it difficult, if not all together impossible, to abide by the just war theory. They contend that the use of drones perpetuate wars, and makes the initiation of armed conflict an easy option, thus loosening moral restraints on the use of force.

Over and above all these frequently recognized challenges, drones today have become major sources of harm to those who operate them. Although the physical distance created by the use of drones is advantageous to the countries that use them, drone operators are not immune to other forms of harm. By widening the distance between the operators and the battleground, drones have arguably further impersonalized the act of killing. There is the fear, then, that by constantly witnessing combat violence on live video feeds, drone operators' natural revulsion to violence is steadily weakened. Worse still, when killing becomes possible through the push of a button or the click of a mouse, there is the fear that an erosion of the inherent value of human life could accompany such acts.

As we shall see later, drone operators have been accused of developing a kind of video game mindset or a "PlayStation mentality" to killing. This suspicion becomes even more compelling given the revelation by military personnel that UAV systems are purposely designed to conform to video game consoles to take advantage of the familiarity some individuals have with these systems.⁵ All these factors have grave consequences in the long run. By remotely perpetrating the killing of other human beings, either guilty or innocent, drone operators become the second victims of their actions. As Donald Cabana writes, decrying execution of prisoners, "there is a part of the warden that dies

⁵ Enemark, Christian. *Armed Drones and the Ethics of War: Military Virtue in a Post-Heroic Age*. (2014), 86

with his prisoner.”⁶ This is true for drone operators as well as for those who execute prisoners directly.

Many drone operators have shared their own daily experiences of how they suffer varying forms of consequences of distance killing; in some instances these consequences can be life-shattering. Peter W. Singer, a scholar at the Brookings Institution, states clearly that though it might be thousands of miles from the battlefield, drone operation involves tough stressors resulting in difficult consequences for the crews who operate them.⁷ While the physical distance created by drones may offer protection against physical injury, drones by their very design create a unique form of virtual presence with horrendous consequences. Unlike fighter pilots who drop bombs and disappear from the scene of their actions, the drone operator watches the carnage caused by the hellfire missiles launched from his drone. As Col. Albert K. Aymar, commander of the 163 Reconnaissance Wing in Southern California, observes, “You watch it all the way to impact, and I mean it’s very vivid, it’s right there and personal...so it does stay in people’s minds for a long time.”⁸ Drone operators are constant virtual witnesses of the carnage they cause through live-feeds and audio-visuals. Developing a PlayStation mentality to killing, being witnesses to the carnages they cause and knowing themselves to be agents of such carnage lead to very many consequences such as emotional vulnerability, Post-Traumatic Stress disorder and Moral Injury. Drone warfare has undeniably brought a new perspective to war and concomitantly creating a new and unsuspecting victim.

Unfortunately, when discussions about the damaging costs of drone warfare are raised, drone operators are seldom seen as victims. Scholarships on drone operations today focus more on external factors such as the political viability of drone operations, the moral implication of distant killing and the question of collateral damages and non-combatant immunity. This thesis investigates the soul of

⁶ Bruce Weber, New York Times, *Donald cabana, warden who loathed death penalty, dies at 67*, October 13, 2013

⁷ James Daofeb, New York Times: *Drone Pilots Are Found to Get Stress Disorders Much as Those in Combat Do*, February 22, 2013,

⁸ Benjamin, Medea. *Drone Warfare*. (London: Verso, 2013),89

the drone operator. This is in line with Veritatis Splendor's consideration of the moral action from the perspective of the acting person. It does not rule out the need for the external considerations as mentioned above, but serves as complimentary to them, in as much as they do not automatically offer us any insight about the soul of the drone operator. Applying virtue theory to a question that is under explored, it utilizes the testimonies of drone operators, interviews of military personnel, studies, articles and findings of scholars in the field of ethics, psychology and psychiatrics to argue that in combat operations, drone operators themselves could turn out to be victims (sufferers) of their actions.

Combat operation does not end at the time when the operators sign off and leave their stations. As they lock the doors behind them, yes, they leave behind the computer screens, the joystick, and the keyboard, but they carry with them the dark and horrible images of destruction. Often times, these images continue to be in replay mode for most of them even as they take their children to school or their family to church.

The first chapter of this thesis examines the value of human life and the duty incumbent on all to protect and preserve it. It also focuses on the paradox of war and how one can both pursue the defense of human life and, at the same time, speak of a virtuous use of deadly force in war. The second chapter examines the historic backdrop to the development of drones. Chapter three focuses on the moral landscape of drone warfare. In chapter four, the relationship between the cardinal virtues and how they relate to the drone operators are examined. Chapter five investigates the victimhood of the drone operators and the final chapter, examines moral injury from a spiritual perspective and the need for a more effective pastoral care for drone operators.

CHAPTER ONE

THE VALUE OF HUMAN LIFE AND THE PARADOX OF WAR

The Christian tradition has consistently maintained that human life is sacred. The book of Genesis captures this divine connection in the following words: “Then God said, Let us make man in our own image, after our likeness...”(Genesis 1:26 RSV). This divine attribute of human life places him far beyond the “dimensions of his earthly existence, because it consists in sharing the very life of God.”⁹ There is something unique about human life that distinguishes it from every other kind of life. This is true not just for one specific human being or the other, but for human life in general. Even at death, human life still exudes this aura of specialness. Kathleen Barry remarks that “Unless one’s humanity has been distorted or perverted, the most normal reaction when strangers witness another’s loss of life is to feel the grief for a life just lost-even the life of a stranger.”¹⁰ The life of every human being is both irreplaceable and priceless.

The book of Genesis, in the first account of creation, places man at the summit of God’s creative activity, as its crown and, very significantly, at the culmination of a process which leads from indistinct chaos to the most perfect of creatures.¹¹ The human life has an invaluable and immeasurable quality which requires that it be cherished and protected above all other earthly considerations. Life indeed is the greatest asset that any human being can possess since it is the substratum of every other human enterprise. Saint John Paul II captures this quite succinctly when he stated that: “Life in time, in fact, is the fundamental condition, the initial stage and an integral part of the entire unified process of human existence. It is a process which, unexpectedly and undeservedly, is enlightened by the promise and renewed by the gift of divine life, which will reach its full

⁹ Catholic Church & John Paul. (1993). The splendor of truth: Veritatis Splendor, encyclical letter. (Boston, Mass, St. Paul Books & Media). No 2

¹⁰ Barry, Kathleen. *Unmaking War, Remaking Men: How Empathy Can Reshape Our Politics, Our Soldiers and Ourselves*. (Santa Rosa, Calif: Phoenix Rising Press of Santa Rosa, 2011), 2

¹¹ Catholic Church, & John Paul. (1995). The Gospel of life: Evangelium vitae: encyclical letter. (Boston, Pauline Books and Media.), No 34

realization in eternity.”¹² In light of the above, and, more importantly, in furtherance of the teaching of the Church on the need to preserve the inherent dignity in human life the Fathers of the Second Vatican Council taught:

Whatever is opposed to life itself, such as any type of murder, genocide, abortion, euthanasia, or willful self-destruction, whatever violates the integrity of the human person, such as mutilation, torments inflicted on body or mind, attempts to coerce the will itself...all these things and others like them are infamies indeed. They poison human society, and they do more harm to those who practice them than to those who suffer from the injury. Moreover, they are a supreme dishonor to the Creator.¹³

The above teaching of the Council Fathers is not an invention of the Church. It is recognition of a truth for all times. In every known human society there have always been certain kinds of prohibitions on the taking of innocent human life.

The Fifth Commandment, as given to Moses on Mount Sinai, expresses the inviolability of human life. The injunction “you shall not kill” (Exodus 20:13) is a recognition of the fact that “Man's life comes from God; it is his gift, his image and imprint, a sharing in his breath of life. God therefore is the sole Lord of this life: man cannot do with it as he wills.”¹⁴ Therefore, God invites all to not only defend, but to promote life. The intrinsic value of human life imposes an obligation on man to preserve it. This is a duty entrusted to all when God invites man to be part of His Lordship of His creation saying to him: “Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth (Gen 1:28).”¹⁵ Then, the question arises: to what extent can one go to preserve this life? What happens when this life is threatened and to what extent can one go to defend it? More so, one may ask, is it always wrong to kill? Saint Pope John Paul II acknowledges that:

There are in fact situations in which values proposed by God's Law seem to involve a genuine paradox. This happens for example in the case of legitimate defense, in which the right to protect one's own life and the duty not to harm someone else's life are difficult to reconcile in practice.

¹² Ibid No 2

¹³ GS No 27. Vatican Council, & Flannery, A. (1975). Vatican Council II: the conciliar and post conciliar documents. (Wilmington, Del: Scholarly Resources)

¹⁴ Catholic Church, and John Paul. *The Splendor of Truth: Veritatis Splendor (VS)*, Encyclical Letter. (Boston, Mass: St. Paul Books & Media, 1993), No 39

¹⁵ Ibid no 42

Certainly, the intrinsic value of life and the duty to love oneself no less than others are the basis of a true right to self-defense. The demanding commandment of love of neighbor, set forth in the Old Testament and confirmed by Jesus, itself presupposes love of oneself as the basis of comparison: "You shall love your neighbor as yourself " (Mk 12:31). Consequently, no one can renounce the right to self-defense out of lack of love for life or for self.¹⁶

The above exposition of Saint John Paul II recognizes the interplay between the sources of morality. Apart from the object of moral acts, circumstance and intention also play very crucial roles. While the "morality of the human act depends primarily and fundamentally on the 'object' rationally chosen by the deliberate will,"¹⁷ one cannot overlook the place of circumstance in human actions. Saint Thomas Aquinas notes that "moral action derives its goodness not only from its object, whence it takes its species; but also from the circumstances, which are its accidents, as it were; just as something belongs to a man by reason of his individual accidents, which does not belong to him by reason of his species" (ST I-II q.18 a.9). Aquinas is convinced that certain circumstances have the capacity to give species to actions/sins. He asserts that "a circumstance makes a moral action to be specifically good or bad (ST. I-II q.18 a.10) and "gives species inasmuch as it is the object of the act or inasmuch as some condition about the object results from the circumstance" (De Malo q2. A6, Rp 9). A human action which, in its moral species, may be evil, can in certain circumstances belong to a different moral species that would not immediately define it as evil. While killing a person- as a moral species- is always wrong, this very moral species can itself disappear in certain concrete circumstances, like in the case of legitimate self-defense against an unjust aggressor.

In the light of the above, one can immediately conclude that even though the Fifth Commandment prohibits the taking of human life, there are certain circumstances in which taking human life can be justified. Apart from legitimate self-defense for individuals, there is also the question of how the State or a given human community can legitimately protect itself against an aggressor. The Catechism of the Catholic Church (CCC) captures this very succinctly: "Legitimate defense can be not only a right but a grave duty for someone responsible for another's life.

¹⁶ Ibid no 55

¹⁷ Ibid no 78

Preserving the common good requires rendering the unjust aggressor unable to inflict harm. To this end, those holding legitimate authority have the right to repel by armed force aggressors against the civil community entrusted to their charge.”¹⁸ Yet, we must note that the issue of legitimate defense for both individuals and State is a complex one. The extent to which political societies can go in the defense of lives under them is still very much debatable. The question of the extent to which deadly force can ever be employed and the universal obligation to preserve life has remained a *questio disputata* that has placed scholars into various camps.

The Church’s response has also been a complex one, as seen from various Church documents. The United States Conference of Catholic Bishops (USCCB) underscores the above fact when they note that the “Catholic tradition on war and peace is a long and complex one, reaching from the Sermon on the Mount to the statements of Saint John Paul II. Its development cannot be sketched in a straight line and it seldom gives a simple answer to complex questions. It speaks through many voices and has produced multiple forms of religious witness.”¹⁹ This has given rise to a variety of opinions.

St. Martin of Tours was a great advocate of a “nonviolent” approach to the enemy. He is reputed to have refused to continue military service, even for a defensive cause, during a barbarian invasion on account of his conviction about nonviolence. He spoke to his commander: “Hitherto I have served you as a soldier: allow me now to become a soldier to God: let the man who is to serve thee receive thy donative: I am the soldier of Christ: it is not lawful for me to fight”²⁰ On the other hand, St Ambrose of Milan maintained that force can be used in defense of neighbor against an

¹⁸ CCC No. 2265

¹⁹ Catholic Church. 1983. The challenge of peace: God's promise and our response : a pastoral letter on war and peace : May 3, 1983. Washington, D.C. (1312 Massachusetts Ave., N.W., Washington 20005): Office of Pub. Services, United States Catholic Conference). no 7

²⁰ Dr. R. Jared Staudt: The Catholic Report, Humanizing War and the Dangers of Drone Warfare, May 25, 2015, http://www.catholicworldreport.com/Item/3898/humanizing_war_and_the_dangers_of_drone_warfare.aspx (accessed June 4th, 2015)

enemy. He upheld that “the law of courage is in driving away all harm.”²¹ St. Augustine, bishop of Hippo, in support of the position of St. Ambrose notes that when it concerns protection of the innocent, war is an extension of the obligation to love one’s neighbor. In fact, he argues that wars, at times, can be necessary ingredients for peace:

It is therefore with desire for peace that wars are waged, even by those who take pleasure in exercising their like nature in command and battle. And hence it is obvious that peace is the end sought for by war. For every man seeks peace by waging war, but no man seeks war by making peace.²²

Thus, for Augustine, those who are capable of protecting the innocent are morally obligated to do so.²³ Yet, Augustine favors the priority of dialogue over war. He notes that “it is a greater glory to destroy war with a word than men with a sword, and to secure and maintain peace by means of peace rather than war”²⁴

Aquinas, took over the Augustinian position on war but gave it a more precise and systematic formulation, which would become the bedrock of the just war theory. This will be outlined much later in this chapter. While Aquinas understands war as a vice opposed to peace, he acknowledges that war can proceed from a rightly ordered will. In his question on war (ST II-II q. 40), Aquinas queries whether it is always sinful to wage war. He argues that war can be necessary for the common good and even for the good of the aggressor. Responding specifically to an objection based on Christ’s teaching on the Sermon on the Mount, Aquinas replies: “Nevertheless it is necessary sometimes for a man to act otherwise for the common good, or for the good of those with whom he is fighting.” Hence, Augustine says (Ep. ad Marcellin. 138): “Those whom we have to punish with a kindly severity, it is necessary to handle in many ways against their will.”²⁵

²¹ Watts, Craig. *Just war, pacifism and the ethics of protection.* Encounter 71, no. 1 (December 1, 2010): 35-62. ATLA Religion Database with ATLASerials, EBSCOhost (accessed May 15, 2015),35

²² Marrin, Albert. *War and the Christian Conscience: From Augustine to Martin Luther King, Jr.* (Chicago: Regnery, 1971), 57

²³ Watts, Craig. Op cit. 36

²⁴ Marrin, Albert. Op cit., 65

²⁵ ST II-II, q. 40, a. 1, ad 2

There is no doubt then that for Aquinas, some wars can be justified. The just war theory seeks to limit and, in fact, regulate the way war should be conducted. Aquinas outlines three conditions that are necessary in the determination of a just war. Firstly, the declaration of war is not the prerogative of the individual. War has to be declared by a legitimate authority. Secondly, for war to be just, it has to be for a just cause. Thirdly, a right intention is required. Every Just War has to be for the avoidance of evils and the advancement of good. These conditions must be present for a war to be declared just.²⁶

However, not everyone is in agreement with Aquinas' position. War is a very complicated phenomenon, and times of war can become very violent and abysmally chaotic. In the words of William Tecumseh Sherman, "war is hell!"²⁷ This reality of war has often led many thinkers to wonder if in such situations, one can truly and meaningfully talk about laws and justice. Furthermore, they would argue that it makes no sense to talk about justice and laws in warfare since wars are fought to be won, and people would generally do anything to conquer their enemy. Bearing in mind this destructive element of war, a nonviolent approach to aggression would seem to be the only possible means of attaining peace. Dorothy Day, who was a passionate believer in nonviolent approach to war, stated very categorically during the Second World War that "Our manifesto is the Sermon on the Mount, which means that we will try to be peacemakers. Speaking for many of our conscientious objectors, we will not participate in armed warfare or in making munitions, or by buying government bonds to prosecute the war, or in urging others to these efforts."²⁸ While the above position may sound plausible for a Christian thinker, the sad reality is that it does not address the question of what to do in the face of a violent life threatening attack by an aggressor.

Despite the ugliness of war and its precariousness, advocates of the just war theory are confident that there could be something like a virtuous use of force in war. The just war theory which

²⁶ ST II-II q. 40, a. 1

²⁷ Dr. R. Jared Staudt, op cit.

²⁸ Ibid

has been described by John Howard Yoder as the “ethical bedrock for a significant body of international law on the conduct of war”²⁹ “states the limit beyond which war as such becomes in itself a wholly non-human and non-political activity, and the point beyond which military force becomes senseless violence, and our weapons no longer weapons of war.”³⁰ The just war theory proposes a set of conditions that must be fulfilled for a nation to be justified in going into war. There are also other conditions that guide nations already at war in using violent means virtuously. The first set of conditions are termed *ius ad bellum* (being just in going to war) while the second are called *ius in bello* (being just in fighting war). The *Catechism of the Catholic Church* outlines these conditions as follows:

The strict conditions for legitimate defense by military force require rigorous consideration. The gravity of such a decision makes it subject to rigorous conditions of moral legitimacy. At one and the same time: the damage inflicted by the aggressor on the nation or community of nations must be lasting, grave, and certain; all other means of putting an end to it must have been shown to be impractical or ineffective; there must be serious prospects of success; the use of arms must not produce evils and disorders graver than the evil to be eliminated. The power of modern means of destruction weighs very heavily in evaluating this condition.³¹

Here the CCC indicates that the decision to go to war should be a product of rigorous consideration. The outlined conditions are provided to aid the evaluation of the necessity for war. It is only in the meeting of all these conditions that war can be contemplated.

The first condition clearly states that a nation cannot simply go to war because there is the need to extend influence and conquer territories. There has to be, first and foremost, an aggressor who constitutes grave harm to the nations that seek to defend themselves through the use of war. Also, wars are not to be engaged in simply as a way of acquiring wealth from weaker nations or “flexing” military muscle. There has to be a right intention for engaging in war. Again, the CCC is clear in stating that that war should be the last resort and there has to be a high possibility of success. Wars should not be entered into as a form of “gambling.” Every war causes some form of damage,

²⁹ Yoder, John Howard. *When War Is Unjust: Being Honest in Just-War Thinking*. (Minneapolis: Augsburg Pub. House, 1984), xiv

³⁰ Ramsey, Paul. *The Just War: Force and Political Responsibility*. (New York: Scribner, 1968), 164

³¹ Catholic Church. (1997). *Catechism of the Catholic Church: with modifications from the editio typica*. (New York, Doubleday), No 2309

hence, the CCC cautions against creating more damage than would have resulted from the acts of the aggressor. For a nation to be justified in going to war, all these conditions are to be met— it is not enough for just one of the conditions to be met. The above conditions constitute the *ius ad bellum* conditions. The *ius in bello* conditions basically deal with the protection of noncombatants and the avoidance of disproportionate collateral damage to civilian life and property.³²

In view of the above, it is evident that the Just War advocates are willing to utilize force, even deadly force, in addressing injustice. Though different from the pacifists, they share some characteristics with them. Like the pacifists, their goal is to secure and maintain peace”.³³ The Just War advocates seek to promote the virtuous use of force. Since the advocates of the just war theory do not “preach” a total war, they by definition seek to limit the use of force. The limit placed on the use of force distinguishes two kinds of the just war proponents: proportionality alone and proportionality and discrimination. Those who claim that “proportionality” alone places limit to the virtuous use of force in addressing injustice state that “use of violence force is deemed ‘proportional’ when the damage caused by one’s use of force is not above and beyond the force needed to restore a just and peaceful state of affairs.”³⁴ Some other Just War theorists, however, observe that even though proportionality limits the use of force, discrimination plays an important role too. Thus, both proportionality and discrimination are necessary in the virtuous limiting of the use of force in tackling injustice. Discrimination in this regard is also called “noncombatant immunity.” The just war theory stipulates that “In order for the use of force to be just, one must discriminate between combatants and non-combatants, and never intentionally kill the latter.”³⁵ However, some scholars question the legitimacy of the concern for noncombatants in war situations. They also question the definition of a noncombatant in drone warfare, where it is increasingly difficult to distinguish between the combatants and noncombatants. In a football game, for instance, no one would claim

³² Mattison, William C. *Introducing Moral Theology: True Happiness and the Virtues*. (Grand Rapids, MI: Brazos Press, 2008)155

³³ *Ibid* page 147

³⁴ *Ibid* page 149

³⁵ *Ibid* page 148

ignorance as to the difference between the players and the spectators. In most cases, if not all, the players are distinctly differentiated by their jerseys. Even more so, the spectators are usually marked out visibly in different locations. War situations are not like football matches. Noncombatants are not clearly marked out in every situation. Moreover, civilians have been used as human shields and at other times, there are possibilities of civilians being used to carry out massive destructive activities in the enemy's zone. In reaction to the above objection, Paul Ramsey would argue that "We do not need to know who or where the non-combatants are in order to know that indiscriminate bombing exceeds the moral limits of warfare that can ever be justified. We have only to know that there are non-combatants –even "only small children and the helpless sick and aged"- in order to know the basic difference between limited and total war."³⁶

Many opponents of the just war theory have argued that it can hardly stop any war. Yet, as Yoder notes, the tradition offers ethical guidance by which communities of conscience have been helped to make judgements about their participation in or objection to particular military endeavors. Among others, the just war theory has in various ways contributed to, at least partial, if not full restraints on the destructiveness of war. Some noncombatants have been protected, some types of weapons or classes of weapons have been declared illegal and the use of disproportionate force by some military commanders have been diminished or all together impeded.³⁷ Even though the just war theory cannot prevent war, there is no doubt that it has considerably shaped views about war and violence in particular. Arthur F. Holmes beautifully captures the positive contributions of the just war theory when he stated:

The ingredients of the just war theory provide no easy solution to many of the agonizing and complex problems of war...But they represent a start, an honest attempt to handle the dilemma by saying that while war may be at times thrust upon us, and in defense of peace and of innocent life, the use of force may sometimes become necessary, yet war and its violence must be controlled. It must be kept under constant judgement of moral principle and biblically based ethics. The proper function of the just war theory is not to justify war in general, not to justify any war in particular. Its function is rather to bring love and justice, those great moral principles of scripture, to bear on the wars of men, and thereby to limit the occasions of war and the violence of its

³⁶ Ramsey, Paul op cit.157

³⁷ Yoder, John Howard op. cit. xiv

consequences by means of moral persuasions, and by national and international law, all the while working and praying for lasting peace.³⁸

While it is the desire of so many to have a lasting peace in our world, the reality however indicates quite clearly that daily, the danger of war looms over the face of the earth and “plans based on aggression, domination and the manipulation of others lurk in human hearts, and sometimes even secretly nourish human intentions, in spite of certain declarations or manifestations of a pacifist nature.”³⁹ This makes the vision of a totally and permanently peaceful human society, unfortunately, a social utopia. Furthermore, the development in military technology with the concomitant arms race among super powers today has further complicated the quest for peace.

Today, the world has woken up to the reality of an increasing technology of weaponry leading to a more sophisticated warfare. This comes with its own challenges. It is evident that throughout history, new military technologies-the crossbow, gunpowder, the machine gun, atomic/nuclear weapons, other weapons of mass destruction, and of course now, Unmanned Aerial Vehicles (UAV) , have occasioned debate over the changing nature of war. Each innovation in its time has promoted a mixture of outrage, awe and soul searching on the part of users and victims alike.⁴⁰ The emergence of drones in the battle field has created new concerns about warfare. Peter Singer notes that “for a new generation, ‘going to war’ doesn’t mean shipping off to some God-forsaken place to fight in muddy foxhole but a daily commute in your Toyota Camry to sit behind a computer screen and drag mouse.”⁴¹ In the next chapter, we shall examine the use of drones in warfare and the ethical concerns it raises.

³⁸ Holmes, Arthur F. *War and Christian Ethics*. (Grand Rapids: Baker Book House, 1975), 20-21

³⁹ John Paul II, "World Day of Peace Message 1982

⁴⁰ Christian Enmark, op. cit. 3

⁴¹ Benjamin, Medea, op cit. page 86

CHAPTER TWO

THE NUTS AND BOLTS AND OF DRONES

A series of historical conditions and years of research and development efforts have given rise to the avalanche of drones of varying shapes and sizes that fill up the sky today. Although contemporary versions of drones have only come to the public attention in the last couple of decades, UAVs have been part of the military inventory since the 1800s. From the Stone Age to the Drone Era, man has always sought a way to detach himself from the harm caused in war. The invention of the long-range crossbow, in place of swords, created a safer distance for the warriors who used them. The invention of drones, which removes the pilot from the cockpit, is the culmination of this effort. In the following chapter, we will examine the background leading up to the contemporary form of drones. We shall also examine drone operations and how decisions are made in the determination of targets and the various chains and levels of commands that lead up to the identification and ‘taking out’ of targets by the drone pilot.

From Balloon to Drone: the History of Unmanned Aerial Vehicle

The Montgolfier brothers, who are reputed to have designed and developed the hot-air balloon, were inspired by the possibility of using such craft in war zones. This possibility would become a reality in 1849, when the Austrian brothers would attempt to launch balloons carrying 30 lb bombs over the Venetian defenses in the Austrian siege of Venice.⁴² They launched some 200 pilotless balloons mounted with bombs against the city of Venice.⁴³ The bombs were released by a kind of timer or by an electric switch connected via a long trailing copper wire. The first attempt was a failure since the wind would most often drive the balloons off their targets. Yet, the unmanned-balloon system remained an experimental tool for military defenses who sought ways to remove man from harm’s way in combat zones.

⁴² Rogers, Ann, and John Hill. *Unmanned: Drone Warfare and Global Security*. (London: Pluto Press, 2013), 13

⁴³ Ian G. R. Shaw, (2014), “The Rise of the Predator Empire: Tracing the History of U.S. Drones”, <https://understandingempire.wordpress.com/2-0-a-brief-history-of-u-s-drones/> (accessed 5th July, 2015)

During the U.S. Civil War in 1862, balloons were also flown in the warzone. Both the Confederate and the Union armies used this aerial system for surveillance purposes: to spy on each other; to track troop movements; and to provide better intelligence on how to direct artillery fire.⁴⁴ In the 1898 Spanish-American War, the U.S. Military equipped a kite with a camera, producing the first aerial reconnaissance photos.⁴⁵ In the same year, there was a transition from the electric-switch balloon system to radio-controlled aerial vehicles. The strides in radio technology created the possibility of improved remote control drones. Nikola Tesla patented the first ever radio-controlled system in 1898.⁴⁶ However, it was not until 1917 that Archibald Low, a British engineer and inventor known as the father of unmanned guidance systems, would conduct a demonstration of a radio-controlled (wirelessly) unmanned flight for the British military under the code name Aerial Target.⁴⁷

In the U.S., a somewhat similar yet very unique, technology was being developed. In 1917, Elmer Sperry, together with radio engineer Peter Hewitt, began to develop the radio-controlled “Hewitt-Sperry Automatic Airplane” or “flying bomb.” It was able to fly 50 miles carrying a 300-pound bomb after being launched by catapult. It was stabilized with the addition of Sperry’s gyroscopic technology. This underwent a number of trial flights between 1917 and 1918. The major difference between the U.S. and the British drone technology at this point was the method of control. Unlike the remotely guided system, the U.S. system was designed to follow a programmed course using an autopilot system consisting of the new Sperry-developed gyroscope, a barometer and a timer, to manage height, direction, altitude and distance.⁴⁸ Thomas Muller would maintain that this “Kettering bug” was the first airplane that had the capability of stabilizing and navigating itself

⁴⁴ Michael Hastings: *The Rise of the Killer Drones: How America Goes to War in Secret, An inside look at how killing by remote control has changed the way we fight*. “Rolling Stone”. April 16, 2012, <http://www.rollingstone.com/politics/news/the-rise-of-the-killer-drones-how-america-goes-to-war-in-secret-20120416#ixzz3nQQ8hF5p> (accessed July 14th, 2015)

⁴⁵ Ibid

⁴⁶ Rogers, Ann, and John Hill op. cit. 13

⁴⁷ Ibid page 14

⁴⁸ Ibid page 15

without a pilot on board.⁴⁹

During World War I, aerial surveillance was used extensively. Aerial Torpedoes, which were a kind of unmanned aircrafts, were used to carry weapons to various locations.⁵⁰ Analysts used stereoscopes to hunt for visual clues about enemy movements. Various forms of embryonic unmanned aerial vehicles would continue to be employed in armed conflicts right up to World War II, when both the Allied and Axis powers utilized them in attacking each other. Curtis Peebles makes reference to how the British Operation Outward sent thousands of Unmanned Balloons which carried about six pounds of incendiary devices with trailing wires that would lead to the destruction of a German power plant in 1942.⁵¹ In World War II, airplanes were also controlled by radio signals once the pilot bailed out of the plane.

While research on the development of unmanned aircrafts for combat purposes continued, the next major development in drone technology would be in 1941 with the introduction of a television system. Drones were equipped with TV transmitters that enabled the controller to see the view from the aircraft. Taking advantage of this epochal invention, Rear Admiral Delmar S. Fahrney of the U.S. Navy would begin to strategize on how to integrate the television system into drones. In 1942, there was a demonstration of how a TG-2 biplane torpedo bomber, which had been converted to a drone and controlled by an operator looking at a six-inch television screen on an accompanying aircraft, carried out a torpedo attack on a U.S. destroyer.⁵² In spite of the advancement in aerial vehicles with the arrival of the TV equipped drones, there remained the challenge of dealing with night flying and bad weather. This challenge was conquered by the addition of a radar guidance system. This would lead to the birth of the TDN-1 and TDR-1. Both drones, developed by the U.S. Naval Aircraft Factory were constructed of plywood monoplanes and were capable of carrying around 2,000 pounds

⁴⁹ Ibid page 15

⁵⁰ Brenda Foster: *Drones, truth about Unmanned Aerial Vehicles*. (Kindle Fire Edition)

⁵¹ Rogers, Ann, and John Hill op. cit. 13

⁵² Ibid page 16

of bombs.⁵³

The intense competition between the U.S. and Russia in the 1950s, for control of space and the launch of a satellite into space which was necessary for guiding rockets and missiles, contributed to the advancement of and shift in drone technology. With the dawn of satellite technology, the years leading up to the 1960s would see a tremendous leap in the design and development of Unmanned Aerial Vehicles. The SDs, 1-5 would be designed with the addition of radio-plane fitted camera. The radar beacon on board helped to track the drone. It also facilitated the possibility of the drone receiving radio commands from a controller on the ground well beyond visual range. Yet, even though there was this great possibility of receiving commands beyond visual range, altitude was also a major issue. In order to avoid being shot down by enemy forces, there was the need for even higher altitude.

The appearance of the Lightning Bug in 1962 became a major game-changer in the drone technology mix. It was both small and “stealth enhanced,” and it had the added advantage of being able to avoid radar-lock from opposing fighters. The subsequent versions could fly to about 50,000 feet at over 600 mph.⁵⁴ During the Vietnam war, the Lightning Bug would come under the program name, *Buffalo Hunter*. The U.S. used drones for tactical missions such as what the military calls ISR: intelligence, surveillance and reconnaissance. During this period, the Air Force developed two attack drones, the BGM-34A and the BGM-34B Firebee, which were never used due to issues with precision.⁵⁵ Drones flew tactical missions into North Vietnam from 1965 right through 1975.⁵⁶ It should be noted that, at this point, drones did not have the capacity to transmit real-time digital images. Hence, the operators could not see what was happening on the front lines and did not have real time-intelligence. The drones followed programmed courses, and images taken during operations were only recorded and retrieved when they returned to the ground station and the films

⁵³ Ibid page 19

⁵⁴ Ibid page 19

⁵⁵ Michael Hastings: op cit.

⁵⁶ Rogers, Ann, and John Hill op. cit page 19

were processed. The years following the Vietnam War were characterized by great advancement in drone technology. Various countries sought ways to spy on their enemies and carry out more precise attacks while minimizing risks on their troops and pilots.

In Israel, the urgent need to monitor the Gaza Strip and carry out various forms of targeted killings made Israel a prodigious manufacturer of drones. In the 1980s, the Israeli Air Force designed and sold several of its models to the Pentagon, including a model called the Pioneer. The Pioneer, which could be launched from naval vessels or from military bases, had a flight range of about 115 miles. America put it to use during the First Gulf War.⁵⁷ The arrival of the Israeli satellite-based Global Positioning System (GPS) and digital flight control system brought a new dimension to the development of UAVs. From 1979 onward, the Israeli Aircraft Industries (IAI) engineers had begun to look at ways of taking care of the challenges of digital imaging and real time intelligence. This initiative led to the design of IAI Scout which was able to broadcast pictures from a stabilized camera.⁵⁸ The Scout proved very effective for the Israel forces in Lebanon in 1982. Eventually, it crossed over to the U.S. where it was developed into the Pioneer UAV for the U.S. Navy who used it in operation Desert Storm in 1991.⁵⁹ Abe Karem, former Israeli Air Force personnel, ushered in a major leap in the development of drones in the United States. Karem who had been involved in developing decoy drones in the Yom Kippur War, led the way in the design of the GNAT 750. The GNAT 750 had the advantage of near real-time video and 40 plus hours endurance. It also had the advantage of a large payload capacity, ease of use and low maintenance, while providing a very low cost per flight hour. One major setback though was that the GNAT 750 would have to be accompanied by a manned aircraft which relayed the signal to a ground station.⁶⁰ The GNAT version of UAV became the derivative version for the Global Hawk and the Predator.

The most common armed drones in use today are the Predator, Reaper, Global Hawk, and

⁵⁷ Michael Hastings: op cit.

⁵⁸ Rogers, Ann, and John Hill op. cit page 27

⁵⁹ Ibid page 27

⁶⁰ Ibid page 31

Fire Scout. The Predator was first flown sometime in 1994. It would eventually become the first weaponized drone. Designed to conduct surveillance, it is equipped with powerful cameras and sensors and can be armed with laser-guided hellfire missiles. The famous MQ-1 Predator is reputed to stay aloft in the sky for several hours at a time and can reach an altitude of 25,000 feet. The Predator added a cloud-penetrating Synthetic Aperture Radar (SAR) to the electro-optical turret of the GNAT; with this, it was possible for the Predator to utilize the GPS along with commercial satellite links. This pushed control and data delivery beyond line of sight, independent of any other aircraft unlike the GNAT 750.⁶¹ Various components were added to the Predator over time to facilitate other uses ranging from surveillance to military combat. The MQ-9 Reaper is able to reach an altitude of 50,000 feet and has the capacity to carry four hellfire missiles. In comparison to the Predator, the MQ-9 Reaper is considered to be bigger, faster and more reliable. The Reaper also has the capacity to fly on its own using autopilot and pre-set GPS location. The MQ-5 Hunter was originally developed in the 1990s. It is powered by two engines and can reach 20,000 feet. The upgraded version has the capacity to carry Viper Strike munitions. The MQ-8 Fire Scout is mostly used by the Navy. Hence it is designed to be able to take off from and land on ships in the sea. It has the capacity to reach 20,000 feet and has a range of about 110 miles.⁶² The RQ-4 Global Hawk, which first flew in 1998, was a large jet-powered HALE UAV with a 40-meter wingspan, intercontinental range and endurance. It is considerably a high altitude aircraft which is able to reach an altitude of 65,000 feet and can scan large areas with its sophisticated sensor suit.⁶³

The September 11th, 2001 coordinated terrorist attack by the Islamic terrorist group al-Qaeda on the United States ushered in a new era in drone warfare. It introduced the dynamic of a non-state enemy to armed conflict and introduced the global war against terrorism. With the global war on terrorism, the Predator was weaponized with hellfire missiles and armed with precision target

⁶¹ Ibid page 33

⁶² Alberto Cuadra and Craig Whitlock: *How drones are controlled* – “*The Washington Post*”, June 20, 2014, <http://www.washingtonpost.com/wp-srv/special/national/drone-crashes/how-drones-work/> (accessed 20th July, 2015)

⁶³ Rogers, Ann, and John Hill, op cit. 32

equipment which was necessary to respond to “high value targets”. The first live firing of Hellfire missiles from the Predator was carried out in February 2001.⁶⁴ The Gray Eagle, which is a derivative of the Predator, has also been added to the drone catalogue. Other types of drones that have found their way into the drone combat zones include the Canadian operated Sperwer which is a mid-size tactical UAV and the French Harfang MALE UAV, which is derived from the Israeli Heron and the Raven RG-11.

The war on terrorism has given rise to the proliferation of drones today. The U.S. Department of Defense is reported to have increased the number of UAVs in service from 167 in 2002 to 7,500 in 2012.⁶⁵ In today's golden era of UAV Technology, there is evidence that many other countries apart from the U.S, have become key players in the development and marketing of drones. Very prominent among these countries are the United Kingdom, Israel, China, and Russia.⁶⁶ While surveillance remains the main focus of some of these countries, the US plays a leading role in the use of drones for armed conflicts and targeted killings. The most common armed drones are the MQ-1 Predator and MQ-9 Reaper which have been considered effective in the fight against non-state enemies.

Today, drones are launched from bases in Afghanistan, Pakistan, and other locations, posts and bases near where they are used.⁶⁷ They are piloted remotely by operators working at places such as Holliman Air Force Base in New Mexico and Nellis Air Force Base in Nevada. The drones employed by the CIA are controlled by operators near Langley, Virginia. Most of the drone operations today are conducted by the United States in collaboration with other countries. Apart from the drone stations in the bases in Afghanistan, Pakistan and Nevada, there is also a Satellite Relay Station in Ramstein, Germany. The *Intercept*, an online publication launched in February 2014 by First Look Media, notes that the relay station facilitates the network of communications among the

⁶⁴ Ibid page 36

⁶⁵ Ibid page 29

⁶⁶ Robert Farley: *The Five Most Deadly Drone Powers in the World*, The National Interest, 16th February, 2015

⁶⁷ Peter Bergen and Katherine Tiedemann, “Washington’s Phantom War,” *Foreign Affairs* (July/August, 2011), <http://www.foreignaffairs.com/articles/67939/peter-bergen-and-katherine-tiedemann/washingtons-phantom-war>.(Accessed July 20th, 2015)

bases and the ground stations in the countries where the U.S. use drones against targets. The Relay station enables the communication between drone operators and their remote aircrafts. At the Ramstien Relay station, the pilots at various ground control stations send commands to the drones they operate through transatlantic fiber optic cables to Ramstien. The Ramstein uplink bounces the signal to a satellite that connects to drones over target countries. The relay station makes a real-time communication possible between the drones and minimizes the lag time between the commands of the pilots and their reception by the aircraft.⁶⁸

Drone Stations and Operations

In this section, we will examine the nature of drone operations and the structure of a typical drone station. This examination will present us with a better understanding of how drone pilots operate and to what extent they are responsible for the happenings in the unmanned vehicle. We will also look at other key players in drone operations.

Drone operation is a complex network of activities. Drones are dependent on wireless transmissions and relay commands and navigational information, usually through a satellite. Drones are controlled by a data link from a ground-control station, from take off until they leave the line of sight. As soon as they leave the line of sight, the ground-control station switches to a satellite link to control the aircraft. The drone also uses GPS to relay its position, and, in the event that the communication link is lost, some are programmed to fly autonomously in circles, or return to base, until the link can be reconnected.⁶⁹

A drone station, usually the size of a shipping container, is equipped with a plethora of diverse sophisticated equipment including overhead TV screens, keyboards, mouse, joystick, headsets, phone systems etc. All these are linked in an interactive network system comprised of the avionics flight display, the navigation systems, system health monitoring and prognostics display,

⁶⁸ Ryan Devereaux, Laura Poitras et al. *The Intercept*: (Joint Investigation with the German news magazine *Der Spiegel*.) <https://theintercept.com/2015/04/17/ramstein/> (accessed, August, 2015)

⁶⁹ Alberto Cuadra and Craig Whitlock: *op. cit.*

graphical images and position mapping, secure communications systems and the inward data processing. Through the computer screens, the operators monitor constant streams of images sent to them from the battle fields and communicate with other bases using headsets. Communication between the commanders on the ground and the stations are also carried out through instant messaging.

For every drone combat mission, including signature strikes and targeted killings there are over a hundred personnel supporting the mission in various capacities. This includes the drone pilot, sensor operator, mission intelligence personnel; aircraft and communications maintainers; launch and recovery element personnel; and intelligence personnel conducting production, exploitation, and dissemination operations.⁷⁰ The drone pilot, with the help of a joystick, flies the plane. He guides the drone as it soars to and within the target zone of operation. The pilot also has control of the trigger located on the joystick. The squeezing of the trigger dispatches the ammunition to a designated target. A different pilot at the base in which operations take place, the “Local Pilot”, is responsible for the takeoff of the drone and its landing.⁷¹

The Sensor Operator serves as the second set of eyes for the pilot; he controls the cameras, the infrared camera, and other high-tech sensors on board the drone that bring the battlefield into full view. The sensor operator fires the laser and guides the ammunitions fired by the pilot in the direction of the target with the help of the laser. The intelligence coordinator /officer takes care of data analysis and monitoring. The intelligence unit monitors high altitude photographs and screens of streaming live videos from drones within their unit. They are also involved in constant instant-messaging with commanders on the ground, providing real-time intelligence on the enemy troops or

⁷⁰ Tech. Sgt. Nadine Barclay: Busted, top 10 RPA myths debunked, published in CREECH AIR FORCE BASE, Nevada website, October 09, 2015 <http://www.creech.af.mil/News/ArticleDisplay/tabid/7026/Article/669932/busted-top-10-rpa-myths-debunked.aspx> (accessed May 5th, 2016)

⁷¹ Nick Turse (2011): *America's Secret Empire of Drone Bases* "Tomdispatch.com, http://www.tomdispatch.com/post/175454/tomgram%3A_nick_turse_mapping_america's_shadowy_drone_wars (accessed August, 2015)

an enemy target.⁷² They provide the ground troops with information that can prevent them from walking into bad situations. The decision to fire the missile comes from the Intelligence Officer who could be anywhere. The intelligence officer can also be the battle commander on the ground or the pilot.⁷³

Drones, no doubt, have become the future of warfare. They are believed to be more precise and faster than manned aircrafts. Most importantly, they reduce the human cost of war from on the side of the users. However, while acknowledging the strides attained in the use of drone technology, use of drones in armed conflict has also created several sources of concern with far-reaching ethical implications. In the next chapter, we will present the ethical implications of the use of drones in armed conflicts.

⁷² Ibid

⁷³ Peter Yost: *Rise of the drones*. A Video Production by WGBH Educational Foundation

CHAPTER THREE

THE MORAL LANDSCAPE OF DRONE WARFARE AND ITS IMPLICATION ON THE JUST WAR THEORY

The introduction of new forms of weapons into the battle field always brings with it varying degrees of moral concerns, especially if these weapons are perceived to have the potential to alter the very nature of armed conflict. Many scholars today view drones as transformative weapons which have not only changed the way wars are fought but are also gradually changing the human aspect of war. The just war theory maintains that war is a human activity subject to human legislations and moral norms.⁷⁴ The controversy over the use of unmanned aircrafts for combat purposes arises from the very nature of drones as “unmanned”. In drone warfare, the unmanned aircraft is not usually battling another unmanned aircraft but rather it is a battle of one unmanned machine against a man. There is then an inherent lopsidedness to the confrontation where one side is safe from at least the physical violence of war while the other is not.

While there are those who vehemently oppose the use of drones in armed conflicts for a variety of reasons, there are others who see the emergence of drones in combat zones as the best thing that has ever happened to modern warfare. In this chapter, we shall explore the varying views with regard to the use of drones in combat zones. We shall also examine the implications of the use of drones on the just war theory.

The Attractiveness of Drones

Those who advocate the use of drones in warfare are quick to point out that in comparison to other conventional means of warfare, drones are more effective and less expensive. Bradley Strawser argues that due to the advantages in the use of drones, it is not only moral to use them in combat but a moral obligation for the U.S. to use drones. Strawser, claims that: "it's all upside. There's no

⁷⁴ Rory Carroll: *The Philosopher making the moral case for US drones*, theguardian, Thursday, August 2nd, 2012 (<http://www.theguardian.com/world/2012/aug/02/philosopher-moral-case-drones>)

downside. Both ethically and normatively, there's a tremendous value."⁷⁵ He concludes that the onus lies on those who oppose the use of drones to demonstrate why they should not be used at all. Strawser is convinced that drones are the future of warfare and that the positive reasons for their use are simply overwhelming.⁷⁶

Drones offer several military advantages. The major edge that drones have over other traditional warfare options is their ability to fly without a pilot in the cockpit. Medaea Benjamin captures this quite succinctly when she writes that with the drone operators safely tucked in air-conditioned rooms far away, the risk of Pilots being captured, killed or maimed in a crash is completely eliminated. This also eliminates the possibility of a pilot causing a diplomatic crisis if shot down in a “friendly country” while bombing or spying without official permission. Due to the distance between the operator and the drone itself, “if a drone crashes or is shot down, the pilot can simply get up and take a coffee break.”⁷⁷ He would not be physically present at the scene of the crash.

Without the need to provide space for aircrew and without a human crew to become tired, unmanned aircrafts can have extremely long endurance. The MQ-9 Reaper is known to linger in the air for many hours and some hybrid vehicles are reputed to hover in the air for weeks.⁷⁸ Drone proponents argue that with drone’s capacity to linger for hours over enemy territory, the operators are better able to assess potential collateral damage before making decisions. Since targets can be trailed for long period of time, drone advocates argue that drones are able to carry out attacks with pinpoint accuracy on targets, thereby minimizing collateral damage. The marathon-hovering capability also helps in gathering requisite information about operations. CIA Director Leon Panetta, while commenting on the U.S. airstrikes in Pakistan in 2009, bragged that “U.A.V.’s are very precise

⁷⁵ Ibid

⁷⁶ Ibid

⁷⁷ Benjamin, Medea. Op. cit., 18

⁷⁸ Ibid., 19

and very limited in terms of collateral damage.”⁷⁹ This advantage has led some drone supporters to argue that the use of drone is not only an effective military strategy, but a moral obligation. Use of discriminating weaponry such as drones saves lives directly – civilian casualties – and indirectly – U.S and allied military personnel who are spared attacks from terrorists targeted and killed by drone raids.⁸⁰ The *Wall Street Journal*, in allaying the fears about civilian casualties, points out that “never before in the history of warfare have we been able to distinguish as well between combatants and civilians as we can with drones.”⁸¹ In addition to their impressive endurance, drones can fly to very remote areas where regular troops would be afraid or reluctant to go.

The maneuvering capability of drones is also a major advantage. High speed aerobatics that can cause loss of consciousness for pilots can be accomplished by drones with ease. This capability is very important in a combat zone where the drone is targeted by enemy forces. Hence, they offer precise airpower in almost any environment. They are able to avoid obstacles and withstand difficult weather conditions. The ability of the drones to fly unnoticed both low and slow over enemy territory has also contributed greatly to their precision. In addition, drones are equipped with sensors that allow them to trail the enemy, or any suspicious-looking objects or persons or snipers on roof tops, without detection. Some are equipped with laser-guided missiles.

From a financial perspective, drones are significantly cheaper than manned aircrafts. In 2001, a Predator drone cost \$5 Million, and the Reaper went for \$28.4 million. By contrast, the F-22 fighter jet cost about \$150 Million.⁸² Therefore, in addition to reducing the human cost of war, drones are also more economical. Notwithstanding all the above advantages, the use of drones has raised many ethical concerns.

⁷⁹ Los Angeles, California (CNN), May 18, 2009

⁸⁰ Bradley Jay Strawser, "Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles" *Journal of Military Ethics* 9/4 (2010): 342-368.

⁸¹ Benjamin, Medea op cit., 101

⁸² Ibid page 20

The Drawbacks of Drone Warfare

In spite of the highly-lauded precision capabilities of drones, Martin Cook argues that drones may be “tactically smart but strategically dumb.”⁸³ Even with the super cameras for instance, the video images are still subject to human interpretations. A truck carrying packs of pomegranates can look just like a truck carrying boxes of grenades in the same way that a tall bearded man in a long caftan can look exactly like another tall bearded man in a robe. The argument about the precision and efficiency of drones is often times built on the assumption that technical efficiency is synonymous with moral goodness. But this is not always the case. An orthopedic doctor can efficiently and precisely amputate the wrong leg. There have been some cases in which a drone equipped with a precision guided munition completely decimates innocent people, while sparing the lives of the targets. Hence, the claim by the *Wall Street Journal* that “never before in the history of warfare have we been able to distinguish as well between combatants and civilians as we can with drones”⁸⁴ has remained a very hotly contested one.

Medaea Benjamin points out, that “gravesites throughout Asia and the Middle East are filled with testaments to drone attacks gone bad.”⁸⁵ Drone pilot Matt Martin, in his book, *The Predator*, confirms that at times, many things could go wrong in drone targeting and execution that could lead to civilian deaths. He describes an experience which left him horrified and speechless in which he had “carefully” planned to blow up a group of supposed rebels whom he had seen standing around a truck. Just after he had “pulled the trigger” two kids on a bicycle appeared on the screen. These innocent boys, who were talking and laughing while enjoying what would turn out to be their last ride together as siblings, were blown up too. As soon as Martin saw them on the screen, he panicked and tried to stop the missile but it was too late. The sensor operator had already released it. He captures this distressing situation:

⁸³ Daniel M Bell Jr., *Just war and counter insurgency: discriminating force*, July 24, 2013
<http://www.christiancentury.org/article/2013-07/discriminating-force>

⁸⁴ Benjamin, Medea. Op. cit., 101

⁸⁵ Ibid., 28

Mesmerized by approaching calamity, we could only stare in abject horror as the silent missile bore down upon them out of the sky...when the screens cleared, I saw the bicycle blown twenty feet away. One of the tires was still spinning. The bodies of the two little boys lay bent and broken among the bodies of the insurgents.⁸⁶

From the above experience of Martin, it is evident that drone civilians casualties remain a great cause for concern. Once the missile has been released, it cannot be retrieved.

Drones are not named Predators, Avengers, Hunters and Reapers because these are merely fanciful names. These names signify what they are designed to do. They rip through barriers, hunting and killing their victims which are sometimes innocent citizens carrying out their normal daily routine of life but are either accidentally or incidentally caught in their crosshairs. Families go to bed at night and never wake up the next morning. There is also the fear that drone warfare creates a certain form of craving for violence among its operators, or those who sell and buy them. Oftentimes, the desire for a sense of “accomplishment” can drive the drone pilot into craving action. A drone pilot once noted after several hours of following a target without sufficient reason to discharge the deadly weapon: “I kept hoping somebody would pull out a rocket launcher. At least it would mean I was making good use of the Predator’s time and resources. Besides, blowing up things was much more interesting than watching men sit around in the dark smoking cigarettes, dancing and holding hands.”⁸⁷ This craving for action can lead to hasty judgment and premature launching of ammunitions that can cause civilian casualties.

The use of drones also leads to what has been termed “moral hazard.” This is described by John Kaag as a situation in which individuals are willing to take part in increasingly risky behaviors if they are shielded from the negative consequences of such acts.⁸⁸ Unlike in traditional warfare, where a nation state would have to face backlash and criticism at home if their soldiers were killed or captured, the use of drones compartmentalizes warfare and removes it from public consciousness by taking away the externalities that would have made the public aware of it in the first place. Drones

⁸⁶ Ibid page 91

⁸⁷ Ibid page 98

⁸⁸ Kaag, John J., and Sarah E. Kreps. *Drone Warfare*. (Cambridge, United Kingdom ; Malden, MA: Polity Press, 2014)107

have, therefore, allowed political leaders to obviate this risk of domestic backlash or public scrutiny.⁸⁹ Since drones considerably minimize the human cost of war (to the country using it), the backlash that often characterizes defeats in war are avoided and as such, drone operators may at times find their cockpits in remote locations a safe haven for their actions.

The Just War Theory and the Morality of Drone Warfare

For a nation to go into a morally justifiable war, the set of conditions outlined by the just war theory must be observed. In conventional war this set of conditions provides legitimate ethical guidelines for both nations entering into war and nations already engaged in war. The introduction of drones into the mix has concomitantly introduced challenges to understanding and adhering to the principles of just war. We will consider how the use of drones has affected the parameters of the *Jus ad bellum* and *Jus in bello* just war principles.

Drones and *Jus ad Bellum*

The first condition for entering into war justly requires that the decision must be a product of rigorous consideration. In conventional wars considerations such as the security of the lives of the soldiers being deployed, their healthcare during the war, provisions for the wounded, funeral arrangements for those who may be killed and compensation for their families make the decision to go to war very challenging. Certainly it necessitates thoughtful and thorough consideration before entering into war. As Msgr. Stuart Swetland observes, “When a nation asks a soldier to risk life and limb, any decent commander will think long and hard before sending in the troops, knowing what is being risked. But if all that is at stake is some hardware that can be programmed to self-destruct, what is there to give a leader pause?”⁹⁰ Due to the easy way in which drones have been utilized in war, there is an unspoken consensus among nations who have them that rigorous consideration is superfluous where drones are concerned. An Iraq combat veteran points out that: "There's something

⁸⁹ Ibid., 6

⁹⁰ Msgr. Stuart Swetland: *Drone Wars: The Morality of Robotic Weapons*, Saturday, Nov 17, <http://www.ncregister.com/site/article/drone-wars-the-morality-of-robotic-weapons> (Accessed 06/20/15).

important about putting your own sons and daughters at risk when you choose to wage war as a nation. We risk that flesh and blood investment if we go too far down this road."⁹¹ The fear among many is that the ready availability of drones increases both the desire for war and the propensity to overrule any condition that would make the realization of such determination impossible.

In the United States, for instance, some members of the Senate have decried the unilateral declaration of drone warfare by President Obama without the input of Congress.⁹² The argument of the U.S. government as to why drones strikes do not require congressional approval is simply for the fact that drones do not endanger the lives of American soldiers. Here then lies the alluring effect of drones. This is a clear example of how tempting drone warfare is and how nations disregarding rigorous considerations justify such declarations. Some scholars argue that drone war could make war a fun-thing. The lesser the risk in going to war, the easier it becomes to enter into it. In Democracies, especially, with elections looming, "Political leaders, having less cause to contemplate the prospect of deaths, injuries and grieving families, might accordingly feel less anxious about using force to solve political problems...and citizens, if not called upon to spill their own blood for a cause, might feel less inclined to 'dissuade leaders from foreign misadventures and ill-planned aggression.'"⁹³ Drones, by separating very explicitly, killing and risking one's life, puts on display the way modern warfare has drifted from the rigor of just war theory .

Secondly, an important criterion of Just War is possession of a just cause, the paradigmatic example being self-defense. Wars are not simply initiated for the sake of wielding military might or the show of brute force. The just war theory makes it clear that the damage inflicted by the aggressor on the nation or community of nations must be lasting, grave, and certain. A nation cannot simply go to war because there is the need to extend its influence, conquer territories, or loot the

⁹¹ PUGLIESE, J. (2013). *State violence and the execution of law: biopolitical caesurae of torture, black sites, drones.* (Abingdon, Oxon, Routledge), 206

⁹² Chris Woods, *'A journey into moral depravity' – US Congressman Dennis Kucinich on covert wars* (June 29th, 2012) Published in Bureau Stories, Covert Drone War)

⁹³ Enemark, Christian, op. cit., 22

resources of weaker nations. There has to be first and foremost an aggressor who constitutes grave harm to the nation that seeks to enter into war. If one uses drones without this just cause, he becomes the aggressor.

Right intention is very important in the determination of the necessity of war. The attack on the World Trade Center in the United States on September 11, 2001 brought about renewed interest in the just cause principle. James Turner Johnson and Jean Bethke Elshtain argued for the expansion of the doctrine of *jus ad bellum* to include preventive war, regime change and spreading of democracy to restore civic peace.⁹⁴ Others would add fighting terrorism to this list. Conversely, scholars such as Neta Crawford, Alex Bellamy, and Daniel Brunstetter disagree with the above position. Rather than expand the ambit of *jus ad bellum* they argue that there should be a “more stringent interpretation of just cause, a less value-laden understanding of right intention, and the reinvigoration of last resort.”⁹⁵ Even though the terrorist action on 9/11 was abhorrent, some scholars argue that it did not threaten the sovereignty of the United States.⁹⁶ Consequently terrorism as a just cause for war against another country has been called into question by some scholars.

The availability of drones today has led to a simplistic definition of what constitutes “lasting, grave, and certain” damage. Acts of terrorism from an individual or a group of individuals who may be pursuing personal objectives could easily be interpreted as a declaration of war by the militant’s host country. Since all it takes to engage in war is the simple push of a button, towns and villages are bombarded for the sake of this one individual or group of individuals. In the case of the war between the U. S. and Afghanistan, for instance, the real question is whether Afghanistan as a nation can be termed an aggressor simply because some of its citizens have been designated as terrorists. In other words, can the terrorist activities of certain individuals in a country amount to a declaration of war by the country itself? Can it be argued that Afghanistan as a country has inflicted, lasting, grave and

⁹⁴ Daniel Brunstetter and Megan Braun (2011). *The Implications of Drones on the Just war theory* . *Ethics & International Affairs*, 25, pp 337-358. doi:10.1017/S0892679411000281, page 342 (Accessed 06/20/15)

⁹⁵ Ibid page 342

⁹⁶ New Zealand International Review (property of new Zealand institute of international affairs) page 3

certain damage to America? And does the fact that the President of Afghanistan refused to surrender one of its citizens designated as terrorist implicate the entire nation? If yes, is this a sufficient justification for the declaration of war on the entire nation?

To use drones to invade another country in order to decimate an aggressor where international law enforcement operations or international diplomacy could lead to a settlement of the conflict violates the principle of last resort. To be justified in going to war, the just war theory requires that all other means of putting an end to a conflict or an external aggression must have been shown to be impractical or ineffective. Necessarily, this implies that war should always be the last resort. Fr. Kenneth Himes presents the definition of the criterion of last resort as the genuine effort to find alternatives to violence and the employment of it only when all other reasonable options were foreclosed.⁹⁷ The “threshold of last resort does not mean that everything has to be tried before resorting to war. Rather, it is a marker that all reasonable alternatives-such as mediation, diplomacy, and sanctions-have been tried and failed.”⁹⁸ It is only when all available means at preventing the aggressor from causing intended harm have been unsuccessfully employed, with other rigorous considerations, that war can be declared. Other means of putting an end to it could mean for example, the use of both political and economic sanctions from the international community or the use of other forms of international pressure and diplomacy.

The use of drones could make the genuine search for peaceful resolution of conflicts almost impossible; it could also make the consideration of other means of conflict resolution unattractive. History is replete with records of how drones make the use of force possible where it would not have been feasible or even thinkable previously. Most countries with combatant drones are most likely to avoid the long and tedious road to peace when, in their estimation, a drone can simply exterminate the other side and impose ‘peace’ even if for just a period of time. Why enter into round-table discussion with your enemies when with the click of a mouse they are sent to their graves? However,

⁹⁷ Himes, Kenneth R op. cit. page 142

⁹⁸ Daniel Brunstetter and Megan Braun (2011). Op cit. page 34

this only prolongs the battle, since there is no assurance that the man who is forcibly muted today will give up anger and resentment tomorrow. Msgr. Swetland argues that “the use of drone lessens the natural barrier to authorizing the use of deadly force. No doubt it is much easier to give the ‘go’ order to attack when the military personnel of one’s country is not being placed in harm’s way.”⁹⁹ The fear then is that this era of drones, if not checked, will make the world a permanent war zone.

In addition, just war theory stresses the point that wars should not be declared in the way and manner that one ventures into “bingo games.” Before embarking in any war, there has to be the possibility of weighing the prospect of success. There has to be the possibility of bringing about the just goal upon which the war is embarked. Although one may not have all the necessary wherewithal to assess the possibility of success in wars, since success depends on a number of factors such as the capability and arsenal of the opposing side, the expertise of those operating the weapons and, of course, other unforeseen circumstances, the just war theory nevertheless stresses that the prospect of success has to be a determining factor.

If success means the restoration of peace or the elimination of all the terrorists, one may argue that, in most places where drones have been used, none of these has been achieved. Taking Pakistan, Iraq, or Afghanistan as points of reference, there is evidence that, to date, drones are still hovering the skies of some of these countries since the wars were declared by the U.S.¹⁰⁰ With the capability of drones remaining in the air for days and weeks and the added advantage of the operators being far removed from the combat zone, drones can be planted for years within the so-called enemy territory, thus prolonging the war. Hence, a grave concern about the frequent use of precision guided munitions and drones today is that it could create a world of perpetual asymmetric wars. The relatively low cost and almost zero risk to the lives of the operators as compared to the enemy can “create a slippery slope” that leads to continued war in places and under circumstances

⁹⁹ Msgr. Stuart Swetland: Drone Wars: The Morality of Robotic Weapons Saturday, Nov 17, <http://www.ncregister.com/site/article/drone-wars-the-morality-of-robotic-weapons>, (Accessed 06/20/15).

¹⁰⁰ Mujib Mashal, Taliban Chief Targeted by Drone Strike in Pakistan, Signaling a U.S. Shift, The New York Times, May 22, 2016 (http://www.nytimes.com/2016/05/23/world/asia/afghanistan-taliban-leader-mullah-mansour.html?_r=0)

that would have been deemed not worth the effort if manned aircraft or boots on the ground had to be put at risk.¹⁰¹ There is a way in which presence of risk to the military significantly serve to restrain use of force. Fearing that the availability of drones in the U. S would lead to a craving to get involved in almost any kind of conflict even outside the jurisdiction of the United States, a supporter of drone attacks warns, "The U.S. government needs to remember that many of the world's jihadist organizations are focused first and foremost on local regimes and that although the United States has an interest in helping its allies fight extremists, Washington cannot and should not directly involve itself in every fight."¹⁰² This warning is very important, especially since under the guise of global fight against terrorism some world powers with varying selfish political and economic interest, are tempted to intervene in almost all kinds of conflicts in other parts of the world, ranging from "village disputes" to religious disturbances.

If the mission of the war in Afghanistan is to stamp out terrorism, there seems to be no assurance that the use of drones alone will achieve this. Often times, it creates new enemies who will keep the terrorists' flag flying. The more innocent people killed, the greater the tendency towards the escalation of terrorism and the aggravation of the anger of full-blown terrorists. As the Yemeni lawyer Haykal Banafa puts it in a message directed to the President of the United States: "Dear Obama, When a U.S. drone missile kills a child in Yemen, the father will go to war with you, guaranteed. Nothing to do with Al-Qaeda."¹⁰³ Hence, drone strikes, especially of this nature, create more enemies. Ted Peters notes that "In Yemen in particular, as soon as a drone strike destroys a home, Al-Qaeda representatives show up with money and a crew for rebuilding. Victims of drone strikes find shelter and consolation from America's enemies."¹⁰⁴ Thus, strikes, especially those that kill innocent people motivate others to undertake retaliatory terrorism against the countries that are

¹⁰¹ Himes, Kenneth R op. cit., 151

¹⁰² Ibid 151

¹⁰³ Kaag, John J., and Sarah E. Kreps op cit. page

¹⁰⁴ Peters, Ted. 2014. "The spirituality of justification." *Dialog* 53, no. 1: 58-68. ATLA Religion Database with ATLASerials, EBSCOhost (accessed January, 2015) page 63

involved in the strike. A former drone operator observes that the killing of civilians by drone is exacerbating the problem of terrorism. He remarks, “We kill four and create ten militants.”¹⁰⁵ The simple argument according to Bryant is that “If you kill someone’s father, uncle or brother who had nothing to do with anything, their families are going to want revenge.”¹⁰⁶ When hellfire missiles are dropped on rooftops in villages, it is not the “drone personnel” who rush to the scene to take the victims to the hospitals or to bury the dead. In most cases, the first responders are the family members but also neighbors and in some cases members of the terrorist groups being targeted. To have members of Al-Qaeda for instance playing “good Samaritans” in a strike scene will only breed more hatred and more enemies against the countries that carry out drone attacks. Use of drones in these instances becomes recruiting tools for terrorist.

Drones and *Jus in Bello*

Even when there is a justification for going to war, the just war theory further insists that there are ways in which wars can be justly fought. Just wars are to be fought justly. The *jus in bello* principles draw our attention to noncombatant immunity and the need to eschew disproportionate harm. With the sophistication of drones, it is expected that drones should be able to better satisfy the requirements of discrimination and proportionality. Not all scholars, however, agree with this assumption.

Discrimination

One of the requirements of just war is that noncombatant casualties should be avoided to the greatest extent possible. This principle of the just war theory prohibits direct attacks on civilians. Article 48 of the Protocol Additional to the Geneva Convention (AP I, 1977) alludes to this principle and categorically states that “in order to ensure respect for and protection of the civilian objects, the

¹⁰⁵ ¹⁰⁵ Murtaza Hussain, Intercept: former drone operators say they were “horrified” by cruelty of assassination program, , Nov. 19 2015, <https://theintercept.com/2015/11/19/former-drone-operators-say-they-were-horrified-by-cruelty-of-assassination-program/>

¹⁰⁶ Ibid

parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives.”¹⁰⁷ But as Paul Ramsey points out, this principle does not “suppose that noncombatants should be morally immune from being killed, but from being directly killed.”¹⁰⁸ At all times, civilians must be identified and should not be directly targeted.

Many advocates of drones point to the precision capability of the drones, marathon endurance and maneuvering abilities as major assets in this regard. In conventional war, troops would usually shoot their way to their targets which, in many cases, results in the death of civilians. Drones on the other hand are able to avoid this since they can fly to any environment and can linger for many hours waiting for the intended target. Drone’s maneuverability, which is superior to what piloted aircraft can do, is an advantage in its propensity to avoid civilian casualties. With a drone’s maneuvering capability and supersonic cameras, drone advocates insist that it is easy for drone operators to distinguish between combatants and noncombatants.

Since the drone operators are safely removed from the battlefield, drone advocates argue that this helps better discrimination. The drone operators are not at any kind of risk, like foot soldiers or fighter jet pilots who may be aware that they are being targeted by enemy forces. Hence, drone operators are able to make better decisions. Drone advocates maintain that since there is no pilot to fear for his life, drones are able to undertake more extreme measures to avoid civilian casualties. In contrast to a pilot flying a fighter jet who, in response to the human instinct for self-preservation, can fire missiles and harm huge civilian populations, the absence of a pilot in the drone completely removes the instinctual human response towards self-preservation which can arise in response to fear or imminent threat.

¹⁰⁷ Ibid page 87

¹⁰⁸ Ramsey, Paul. *The Just War: Force and Political Responsibility*. (New York: Scribner, 1968), 158

The above claims have been challenged by those who oppose the use of drones for warfare. Some scholars argue that even though the drone pilot is safely removed from the combat zone, his separation from the combat zone may have “physiological effects that could magnify the challenges of adhering to the principle of discrimination. The fact that the information the operator receives is assessed in a safe environment may alter a pilot’s ability to assess threats.”¹⁰⁹ He may be overly concerned about the safety of the soldier on the ground and fire at any truck he sees irrespective of the content of the truck. As Air Force Major Matthew Morrison noted, “When you’re on the radio with a guy on the ground, and he is out of breath and you can hear the weapons fire in the background, you are every bit as engaged as if you were actually there.”¹¹⁰ This would mean that drone operators are still very much psychologically and emotionally involved in their operations. Even though they are far away, they are not completely detached from the battlefield.

In addition, it has also been argued that mere sophistication of drones does not necessarily guarantee better discrimination between combatants and noncombatants. The drone will only discriminate to the extent that the human operator wants it to, and still depends on his sense of judgement. There have been situations where drone operators, while being safely removed from the combat zones, and in spite of the long hours of trailing what they perceive to be their target, ended up blowing up civilians. In Afghanistan, for instance, a drone operator had followed a so-called target for over three hours and when he fired at the convoy that he had suspected to be Taliban convoy, he realized he had fired at a convoy of civilians. This took place even after analyzing the pattern of life live movement before firing. It was only after firing at the convoy of trucks that the pilot noticed some terrified women survivors waving cloths to surrender as they carried babies from the wreckage.¹¹¹ Again, in February 2002, a drone pilot reportedly killed three Afghan men, including a tall Afghan whom he thought was Osama Bin Laden, but who turned out to be an

¹⁰⁹ Daniel Brunstetter and Megan Braun (2011). Op cit., 349

¹¹⁰ Ibid., 349

¹¹¹ Williams, Brian Glyn. *Predators: The CIA's Drone War on Al Qaeda*. 2013. <<http://public.eblib.com/choice/publicfullrecord.aspx?p=1336332>>. page 218

innocent villager gathering scrap metal.¹¹² On April 6, 2011, Marine officers mistook U.S. Marine Staff Sgt. Jeremy Smith, 26, and Navy Hospital man Benjamin D. Rast, 23, for Taliban insurgents and killed them in a drone strike. Jerry Smith, the father of Sgt. Smith on seeing the video of this strike simply said, “You couldn’t even tell they were human beings - just blobs.”¹¹³ In December 2012, there was a case of a drone attack on a wedding party in Yemen. In this particular attack, twelve men were killed as they accompanied the bride and her family to the neighboring town of the groom.

While the U.S. government maintained that all the men were militants, the Yemeni government argued that the strike was a tragic mistake that killed only civilians. The fact that \$800,000 in cash was paid as compensation to the families of the victims may indicate that there was truth in the Yemeni Government’s claim.¹¹⁴ The New America Foundation estimates that there have been approximately 337 drone strikes in Pakistan alone from 2004 until Oct. 24, 2012 causing casualties of between 1,908 to 3,225 people. These strikes have killed 1,618-2,769 combatants, about 153-192 civilians and another 130-268 persons whose identities were unknown.¹¹⁵ The Bureau of Investigative Journalism on the other hand reports that “roughly 2,562-3,325 people in Pakistan have been killed by drone strikes between the years 2004-2012. From these total figures, 474-881 have been identified as civilians, including 176 children”.¹¹⁶ Drones, by themselves, cannot discriminate perfectly between combatants and non-combatants.

The laws of war state that belligerents may not attack civilians, wounded soldiers, the sick, the mentally ill, or captives. With the use of drones which provides only a “screen size” view of an entire city, is it possible that this law be observed? Robotic expert Noel Sharkley notes that “the Geneva Convention requires soldiers to use common sense. But computers have no common sense.

¹¹² Jane Mayers, “The Risks of the C.I.A.’s Predator Drones,” (New York, October 26, 2009)

¹¹³ Benjamin, Medea op cit., 28

¹¹⁴ Himes, Kenneth R. op cit., 127

¹¹⁵ Msgr. Stuart Swetland: Drone Wars: The Morality of Robotic Weapons Saturday, Nov 17, <http://www.ncregister.com/site/article/drone-wars-the-morality-of-robotic-weapons> (Accessed 06/20/15).

¹¹⁶ Speaker's Briefing. (2013). Speaker's briefing: Psychological terror? Lessons from Pakistan and Yemen: <https://appgondrones.files.wordpress.com/2013/03/speakers-briefings-05-03-2013.pdf> (accessed, 20th June, 2016)

How can they be ethical when they have no means of distinguishing grandmothers from soldiers?”¹¹⁷

The role of the operators cannot be over stressed. Caution has to be applied at all times and the kind of weapon used must take into cognizance the proximity of the military target and all the non-military targets.

Apart from the fact that drones themselves cannot distinguish between innocent civilians and combatants, when the missile is fired, there is no possibility of reversing the command. For instance, the enemy decides to surrender peacefully. In a physical battle, enemy soldiers have the chance to surrender, and the law makes provision for such. Protocol I of the Geneva Convention clearly states that there is a legal requirement to accept the surrender of an individual who decides to surrender himself. Such a person is literally considered “outside of combat” and can be taken as a prisoner of war. Drone warfare, of course, offers no possibility of dealing with such an individual since the man who is controlling the drone may be thousands of miles away from the man who is surrendering. There is no identifiable or feasible way for someone to surrender to an unmanned drone. The former vice-chairman of the Joint Chiefs of Staff, General James Cartwright captures this when he said: “To me, the weakness in the drone activity is that if there’s no one on the ground, and the person puts his hands out, he can’t surrender...What makes it worse with a Predator is you’re actually watching it. You know when he puts his hands up.”¹¹⁸

Proportionality

The principle of proportionality traces its roots to Thomas Aquinas’s doctrine of double effect. An action can have two effects, only one of which is intended, while the other is beside the intention. Moral acts get their character in accordance with what is intended, but not from what is beside the intention, since the latter is incidental;¹¹⁹ it is accidental and part of the circumstances that

¹¹⁷ Benjamin, Medea op cit., 164

¹¹⁸ Bergen, Peter L., and Daniel Rothenberg. *Drone Wars: Transforming Conflict, Law, and Policy*. (New York: Cambridge University Press, 2015), 202

¹¹⁹ ST II-II, q. 64, a. 7

affect its morality as an individuated act, but are not part of its object and therefore not determinative of species. In the context of war, striking a particular military target is the intended effect, the collateral damage is the unintended effect. It is the former, not the latter, that determines the moral character of the action. Yet, the latter can constitute a grave evil if the actor could have avoided the unintended effect but simply ignored all the precautions or pretended to be ignorant of the unintended effects. The just war theory cautions that one has to avoid creating more damages than would have resulted from the acts of the aggressor. In order to stop an aggressor from causing damage, one has to guide the available means in the dispatch of this duty so that one's action does not become counterproductive.

The underlying goal of the principle of proportionality is, therefore, to balance the possible harm inflicted with the anticipated military gains of a military action. It prohibits disproportionate harm. The military gain must exceed the anticipated damage to civilians or their property. Article 51(5)(b) of AP I proscribes “an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.”¹²⁰ Military organizations therefore, must do everything feasible to minimize collateral damage.

Proponents of drones argue that with the advanced technological component of drones, drones adhere more accurately to the principle of proportionality. They are able to target more precisely, thus minimizing the use of force in the execution of military operations and consequently the possible harm inflicted. Using the war between the U.S. and Afghanistan as a case study, proponents of drones point out that in the summer of 2009, General Stanley McChrystal employed drone strikes to reduce civilian casualties and was able to do so by 28 percent.¹²¹ Fr. Himes maintains that:

¹²⁰ Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, (AP I, art. 51(4) and 51(5)(b); art. 57(2)(a)(iii), <https://www.icrc.org/ihl.nsf/7c4d08d9b287a42141256739003e636b/f6c8b9fee14a77fdc125641e0052b079>

¹²¹ Daniel Brunstetter and Megan Braun (2011). *Op cit.*, 348

There is no firm evidence that drone strikes done with careful oversight necessarily cause disproportionate civilian casualties, while the preponderance of evidence suggests that drone strikes are considerably more discriminating than older, more familiar methods of aerial assault...This is not to say there have not been individual drone strikes that caused disproportionate civilian deaths, but taken as a class of actions there is nothing inherently disproportionate about drone attacks. Indeed the data suggests drone attacks are less likely to cause civilian deaths than other weapons used in modern warfare such as cruise missiles, artillery shells, or fighter planes dropping smart bombs.¹²²

Many scholars, however, are of the opinion that drones are likely to produce more evils and disorders than other weaponry. A source estimates that the United States kills a 'high-value target' less than 2 per cent of the time; the remaining 98 per cent consists of "low-value targets", civilians or people whose identities are unknown.¹²³

While the above estimation is debatable, there is no doubt that apart from the wanton destruction of lives and properties that often accompany drone strikes, researchers have shown that in most cases, villages or even countries that are surrounded and bombarded with drones usually experience both psychological and social disorders. The psychological condition of drones hovering in the skies for weeks and months in one's homeland without the inhabitants knowing when it is going to strike or who the target is or whose funeral will be celebrated the next day is even more scary than death itself and produces very distinctive negative mental trauma and exasperation. Many researchers in the use of drones agree that though Drones may kill relatively few, they terrify many more. Malik Jalal, a tribal leader in North Waziristan, notes that drones "turned the people into psychiatric patients. The F-16s might be less accurate, but they come and go."¹²⁴ In the case of drones, they can stay in the sky for long period of time leaving the people in constant panic.

Researchers at the Standard and NYU Schools of Law state that the drone program in Pakistan is terrorizing the people and having counterproductive effects.¹²⁵ John Glaser remarks that:

¹²² Himes, Kenneth R op. cit., 140

¹²³ Dalziel, Natalie; *Drone strikes: Ethics and strategy*, New Zealand International Review, Vol. 39, No. 3, May/Jun 2014, page 3

¹²⁴ Steve Coll, the drone war in Pakistan. <http://www.newyorker.com/magazine/2014/11/24/unblinking-stare> (accessed July 16th, 2015)

¹²⁵ John Glaser , Study: 'Counterproductive' Drone War 'Terrorizes' Civilians in Pakistan The drone war has given rise to "anxiety and psychological trauma among civilian communities", September 25, 2012

“The US drone war in Pakistan not only kills and injures civilians, the report finds, but it traumatizes the population and has led people to keep their children home from school and to avoid any large grouping of people, however innocent”¹²⁶. Many civilians who live in these areas that can be best described as ‘under drones’ suffer various forms of “pervasive sense of anticipatory anxiety”. In a series of interviews conducted by Amnesty International, residents of some villages where drone strikes are prevalent complained of the psychological effects they suffer daily due to the presence of drones. A resident of Tappi Village, North Waziristan, told Amnesty International that: “Local tribal people generally live in fear and stress and feel psychological pressure. They think they could be the target of a drone attack because wrong information might be given to drone operators,” Another resident of Ezzo Khel, North Waziristan, remarked that “Everyone is scared and they can’t get out of their house without any tension from the fear of Drone attacks. People are mentally disturbed as a result of the drone flights; we can’t sleep because of the planes’ loud sound. Even if they don’t attack we still have the fear of attack in our mind.” For Atif, a resident of Darai Nisthar, he has to live with the reality of keeping tablets (sleeping pills) under his bed in order to get sleep at night.¹²⁷ For some others, the sound of a drone becomes a constant reminder of the death of a family member. Apart from the aforementioned psychological effects on the villagers, there is also the impoverishment of the villagers due to property loss and damage to social amenities resulting from a drone strike. In addition, injury from flying debris or the explosive force caused by a strike can harm the person who is the main source of family income.

A major factor that leads to high casualty rate of civilians in drone operations is the practice of what is called double-tap which is designed to create maximum damage to targets. The double-tap is a procedure wherein two missiles are fired successively at designated targets in order to ensure targets are killed in an operation. The double-tap tactic has posed great danger in the number of civilian casualties killed in drone operations. In most cases, individuals who would rush to the scene

¹²⁶ Ibid

¹²⁷ Amnesty International: "Will I be next?" US Drone Strikes in Pakistan, Amnesty International Publications, 2013, <https://www.amnestyusa.org/sites/default/files/asa330132013en.pdf> (accessed 20th July, 2016)

of attacks to help their loved ones hit by the first attack are usually blown apart by the second strike. Thus double-tap strikes make the ordinary humane gestures of sympathy and provision of relief to victims of an earlier attack a dangerous venture. A study by the U.K.-based Bureau of Investigative Journalism found evidence that “usually, more civilians are killed in double tap operations than even the first operation.”¹²⁸ In fact, a source responsible for providing information about casualties in Pakistan has claimed that more than fifty civilians have died in follow-up attacks that harm those coming to the relief of victims of a first strike. As a result of this practice, families and emergency workers are reluctant to come to the aid of those injured in drone attacks.¹²⁹ This reluctance often times lead to the death of those severely injured, whose lives could have been saved. In the first operation, a target is intended. In the follow up strike, sympathizers, family members and other passersby who may out or curiosity run to the scene of the first hit are caught up in the attack.

In the midst of all the possible damages that can oftentimes characterize the use of drones in warfare and more, importantly, the challenges posed by the very nature of drones which makes the operators to be physically detached from the combat zone, it is pertinent that all measures geared towards prudent and just use of drone would have to be put in place. These measures will become effective guides for those who operate the drones. Their sense of judgement, their connection with those who are the so-called targets and the obligation to act justly at all times should be the determining factor in the discharge of their duties.

The Just War principles provide fundamental guidelines for the legitimate use of force in war. These principles stand very clearly as the most durable and eloquent paradigm for the moral evaluation of ongoing wars and the yardstick for the determination of the legitimacy of going to war. The strict adherence to the Just War Principles before (*Jus in Bello*) and during (*Jus ad Bellum*) war, many argue, would in so many ways limit arbitrary use of wars for settling of political scores.

Yet, in spite of the above undeniable values of the just war theory, many scholars have

¹²⁸ Benjamin, Medea op cit., 26

¹²⁹ Himes, Kenneth R op. cit., 126

argued that the Just War principles do not serve as an adequate or complete guide for the moral evaluation and regulation of war. The just war theory, they maintain, has become anachronistic and insufficient for dealing with right moral actions in war, given the new situations in the twenty-first century. These new situations include the changes in the nature of war in general, in how military forces are organized, and in the many contesting views about morality and ethics of war. The above considerations have called into question the suitability of the just war theory as a guide, for instance, in the fight against terrorism. The global war on terrorism is not the traditional or conventional war which the formulators of the just war theory had envisioned. The just war theory certainly did not envision a war fought with drones; they were formulated in an era of medieval weaponry. And obviously, the just war theory did not envision a non-state terrorist group such as Al-Qaeda, the Islamic State of Iraq and Syria (ISIS) and Boko Haram.

In the light of the above, some scholars point to the inadequacy of the just war theory and advocate for a paradigm shift. David K. Chan and Claudia Card note that:

The just war theory has taken on the characteristic of Ptolemaic cosmology prior to the Copernican revolution. The earlier view of the cosmos as consisting of sun, planets and stars orbiting around the earth at its center was once a well-established theory among astronomers. As more careful and precise observations of the positions of heavenly bodies showed inconsistencies with the Ptolemaic model, epicycles were introduced into the orbits to make the theory fit the data.¹³⁰

Noam Chomsky argues that the just war theory does not provide adequate universal justification for acts of war. In some instances of war, the criteria outlined by the just war he argues were theoretically questionable and even vacuous.¹³¹ Given this contention on the adequacy of the just war theory, some writers today advocate for a more “virtue-based” approach to war. In the next chapter, we will look at the roles of the cardinal virtues in drone warfare and how the operators should be guided by virtues in their discharge of duties.

¹³⁰ Chan, David K., and Claudia Card. *Beyond Just War: A Virtue Ethics Approach*. Basingstoke (England: Palgrave Macmillan, 2012),4

¹³¹ Noam Chomsky, Problems with "Just war theory ", Speaking to the students at The United States West Point Military Academy, West Point, New York, 4/20/2006, <https://www.youtube.com/watch?v=e1pNz8A5vMA>

CHAPTER FOUR

THE CARDINAL VIRTUES AND THE DRONE OPERATOR

From a much wider perspective, some scholars argue that there has to be a foundational moral shift, a shift from a right based ethics, which is central to the just war theory, to a virtue based ethics.¹³² This shift gives rise to questions such as: Should the character of a drone operator be a matter of consideration in the determination of his suitability for his job? Does the knowledge of the fact that a potential drone operator is addicted to violent video games make any difference in hiring him for the job of a drone operator? Would his character have any role to play in his understanding, interpretation and application of the basic principles of war? Does the presence or absence of virtues in the drone operator affect his discharge of duties and most importantly, his application of the just war principles? What is the relationship between the Just War principles and virtues? The above questions constitute the focus of this chapter.

Virtue ethics pays attention not simply to norms but to the agent of the action. Whereas the just war theory provides universal guidelines for war, in the concrete *hic et nunc* situations of war, paying attention to the agent is necessary. Even in areas where the just war theory provides guidance on a universal basis, it does not provide personal guidance on how particular law should be carried out well in particular situations. It is not sufficient for those involved in war to simply follow some rules of engagement. The nature of war in the twenty-first century also demands a focus on the agent of war himself who must make concrete judgements within evolving and fluid situations where cameras allow for a new awareness of effects and situations, and not simply the rules he would follow in normal warfare. War has always been a human activity and now that wars are increasingly becoming depersonalized, there is a greater need to pay more attention to the agent. In the case of drone warfare, it is important to know the person behind the computer screens. Knowing the personality of the one behind the computer screens is vital in assessing his or her capacity for

¹³² Ibid., 57-66

understanding, interpreting and even applying the rules governing the use of force, just in the same way that knowing the personality behind the wheel is vital in understanding one's suitability for driving. One, who is mentally challenged, rash, presumptuous and angry for instance, could pose a grave danger behind the wheel.

The character of the drone pilot is equally important in his discharge of his duties. His personality is a necessary aspect of decision making and can determine his clarity of judgement. The moral character of the drone pilot plays a crucial role in his interpretation and application of the general principles of war. David K. Chan and Claudia Card maintain that the focus has to be on what kind of person makes the moral decisions and what virtues are needed in such a person in order to do it well, not solely on rules that can be followed mechanically by anyone, good or bad in character.¹³³ These considerations provide the basis for a far-reaching demand, the demand of virtues. Gregory Trianosky argues that virtues are indispensable for wisely applying rules. They are also especially needed in determining the course of action when no rules have been given. In a given situation when there are conflicting rules that need to be resolved, virtues are necessary. Again, even when there are rules, "the rules themselves do not tell us how to apply them in specific situations, let alone how to apply them well, or indeed when to excuse people for failing to comply with them,"¹³⁴ these specifics are determined by virtue.

However, it must be pointed out that "Virtues are not complete alternatives to moral principles: both are needed for ethics to be practical."¹³⁵ Virtues are the bedrock of a man's character. They are essential for the proper discharge of his duties and ultimately fashion his perception and interpretation of reality. Many scholars have defined virtues variously. Christina and Fred Sommers see virtue in its broad sense as "any trait or capacity that enables an object to perform its function...more commonly, 'virtue' refers to a special kind of excellence that only human beings

¹³³ Ibid., 65

¹³⁴ Ibid

¹³⁵ "Notes on moral theology: 1991." *Theological Studies* 53, no. 1 (March 1992): 60-126. ATLA Religion Database with ATLASerials, EBSCOhost (accessed November 12, 2015).

possess or lack. In this narrow sense the virtues are moral excellences that contribute to a life of human fulfillment.”¹³⁶ Aquinas defines virtue as “a certain perfection of a power.”¹³⁷ He describes the human virtue as a habit that accords with human nature, lending power, smoothness, and promptitude to the operation of that nature. It is a good habit that is operative; and makes its subject good, and makes the subject's work good. By virtue we live rightly.¹³⁸ The *Catechism of the Catholic Church* describes the human virtue as “habitual and firm disposition to do the good. It allows the person not only to perform good acts, but to give the best of himself. The virtuous person tends toward the good with all his sensory and spiritual powers; he pursues the good and chooses it in concrete actions.”¹³⁹ Virtue in this sense is habitual. It is not merely a single virtuous act. Being virtuous is also not just about carrying out activities rightly; virtues affect the one who possesses them. To love the true good is in a sense to become one with it.

More so, virtue is essentially about good character. It is habit that inclines one to freely act in a good manner, both externally and internally.¹⁴⁰ In this regard, virtue is fundamentally about who we are – it is more about “being” than “doing”, more about personality than activity. Therefore, even though virtue has been described as “habit” James Toner notes that “Virtue is not a habitual way of acting, formed by the repetition of material acts and engendering in us a psychological mechanism. It is a personal capacity for action, the fruit of a series of fine actions, a power of progress and perfection.”¹⁴¹ Furthermore, “Virtuous actions flow from the character of an agent, and

¹³⁶ Sommers, Christina Hoff, and Fred Sommers. 1993. *Vice & virtue in everyday life: introductory readings in ethics*. (Fort Worth: Harcourt Brace Jovanovich College Publishers), 250

¹³⁷ ST I-II, q. 55, a. 1,

¹³⁸ Paul J. Glenn: A tour of the Summa, http://www.catholictheology.info/summa-theologica/A_tour_of_the_Summa (Commentary on ST I-II, Q. 55, Art. 1)

¹³⁹ CCC No 1803

¹⁴⁰ Ibid

¹⁴¹ Toner, James Hugh. *Morals Under the Gun: The Cardinal Virtues, Military Ethics, and American Society*. (Lexington, Ky: University Press of Kentucky, 2000), 120

that character consists in a larger set of dispositions to behave in accordance with the particular virtue.”¹⁴² The *Catechism* summarizes the human virtues as:

Firm attitudes, stable dispositions, habitual perfections of intellect and will that govern our actions, order our passions, and guide our conduct according to reason and faith. They make possible ease, self-mastery, and joy in leading a morally good life. The virtuous man is he who freely practices the good. The moral virtues are acquired by human effort. They are the fruit and seed of morally good acts; they dispose all the powers of the human being for communion with divine love.¹⁴³

Among the human virtues are the cardinal virtues. The word, cardinal, is derived from the Latin *cardines* which means, ‘hinge’. They are the virtues on which hinge the other virtues, “On these the other virtues depend as a door depends on its hinges”¹⁴⁴ Hence, the cardinal virtues play a very pivotal role in the good life. The cardinal virtues include prudence, justice, fortitude, and temperance. The drone pilot requires these human virtues in order to more effectively and fruitfully carry out the demands of his responsibilities.

Prudence is the virtue that helps us to discern our true good at all times and aids our choice of the best means to attain it. The *Catechism of the Catholic Church* amplifies St. Thomas’s definition and describes prudence as:

The charioteer of the virtue (*auriga virtutum*). It guides the other virtues by setting rule and measure. It is prudence that immediately guides the judgment of conscience. The prudent man determines and directs his conduct in accordance with this judgment. With the help of this virtue we apply moral principles to particular cases without error and overcome doubts about the good to achieve and the evil to avoid.¹⁴⁵

Prudence involves knowing and doing what is just, courageous and temperate in the right way. The word prudence derives from the Latin root “prudential” which translates as “practical wisdom or good sense.”¹⁴⁶ Prudence is the virtue that guides us in making the right decisions in particular life situations and acting well based on such deliberation. It is, described by James H. Toner as, “the

¹⁴² Strawser, Bradley Jay. *Killing by Remote Control The Ethics of an Unmanned Military*. (Oxford: Oxford University Press, 2013), 93 <<http://site.ebrary.com/id/10688741>>

¹⁴³ CCC No 1804

¹⁴⁴ Paul J. Glenn (Commentary on ST. I-II q. 61, a. 1)

¹⁴⁵ CCC 1806

¹⁴⁶ Mattison, William C. *Introducing Moral Theology: True Happiness and the Virtues*. (Grand Rapids, MI: Brazos Press, 2008), 98

capacity of discernment by which one translates the general demands of morality into concrete action...it helps us to determine the right from the wrong, the helpful from the hurtful, the virtuous from the vicious.”¹⁴⁷ Decisions are not always as easy as many think, hence the virtue of prudence helps to specify virtuous actions in particular situations, in the *hic et nunc*. This is different from the mere application of universal principles in particular circumstances. We must note however, as William Mattison, points out, that “Prudence is not simply the deductive, mechanistic application of general rules to particular situations. Prudence is the ability to see and act what is good in specific situations.”¹⁴⁸ Aquinas argues that since prudence is no mere knowledge of what things are but of how to act it belongs to the practical intellect or reason, not to the speculative intellect.¹⁴⁹

According to Aquinas, prudence has certain quasi integral elements that are essential in the realization of a virtuous life, such as: understanding, shrewdness, circumspection, foresight and caution. Understanding deals with the knowledgeable grasp of the situation at hand. Foresight is the clear view of how future contingencies may bear upon the present occasion. Shrewdness involves the quick and ready estimation of what is suitable in a given situation. Caution looks to avoid evil, especially evil that wears the mask of good. Circumspection is the ability to see what is suitable in a given situation.¹⁵⁰ All these elements contribute very specially in the pursuit of reward in life.

The drone pilot may know all the Just War principles, but it is prudence that guides him in the application of these principles in given situations. Prudence is also responsible for the determination of what constitutes the best good or lesser evil that would be possible in such circumstances and how to realize that. Taking the principle of discrimination as an instance, prudence guides in the “here and now” application of such a principle. The drone operator who is prudent knows that even though a high target may be within the radar, if in his preparation to fire a missile he notices the presence of women and children on the scene, he would need to decide the

¹⁴⁷ Toner, James Hugh op. cit., 62

¹⁴⁸ Mattison, William C op. cit., 98

¹⁴⁹ ST II-II, q. 47, a. 2,

¹⁵⁰ Paul J. Glenn (commentary on ST II-II, q. 49)

immediate thing to do to avoid innocent casualties. A prudent drone pilot is able to spontaneously and fully size up a given situation and take firm practical steps in achieving the best result possible. In the case above, he may decide to abort a particular mission and wait patiently for another time to strike, except of course in a situation where a high military target is on the verge of causing colossal damage and the only way to avert this would be to stop it.

Here the principle of double effect may apply. Especially when a target purposely runs into a crowd, the drone pilot would need to apply caution. Aquinas describes the inordinate rushing into action under the impulse of the will or passion as precipitation, which has the character of imprudence. Hence, a drone pilot who simply fires a Hellfire missile on an enemy target without checking to see if the enemy is close to a hospital, market or residential area is imprudent. This act according to Aquinas is a sin and the inclination to act imprudently is a vice.¹⁵¹ Apart from precipitation, thoughtlessness is also another sin against prudence wherein the drone pilot willfully fails to judge a situation rightly because of contempt for, or a neglect of, the things on which right judgment depends.¹⁵² The anger over a terrorist attack in one's country should not be the sole inspiration for bombing a target. To pursue a target simply because one is angry at a current or past terrorist attack in one's country can vitiate proper considerations in the pursuit of a new target. The rules on listing, identifying and executing targets must be followed at all times. A prudent drone pilot is aware that he is not on a revenge mission, and is able to act on that awareness.

Another cardinal virtue which is greatly required by the drone pilot in his operations is the virtue of justice which Aquinas describes as a fundamental virtue.¹⁵³ Citing Cicero, he points to the centrality of justice when he notes that "good men are called good chiefly by reason of their justice, and that "the splendor of virtue shines out from justice more than from other virtues."¹⁵⁴ Justice is the virtue that inclines us to good relationships with others. Cicero popularized the definition of justice

¹⁵¹ ST II-II, q. 53, a. 3,

¹⁵² ST II-II, q. 53, a. 4,

¹⁵³ Paul J. Glenn (Commentary on ST. II-II Q. 58, Art. 3)

¹⁵⁴ Ibid

as *Iustitia suum cuique distribuit*. (Justice renders to everyone his due.)¹⁵⁵ In this sense, Justice is the stable disposition to render to everyone what is due him. The *Catechism of the Catholic Church* describes the virtue of justice as: “moral virtue that consists in the constant and firm will to give their due to God and neighbor. Justice toward God is called the ‘virtue of religion.’ Justice toward men disposes one to respect the rights of each and to establish in human relationships the harmony that promotes equity with regard to persons and to the common good.”¹⁵⁶ Aquinas maintains that that which is due one is his right; justice then is the virtue which observes the rights of all.¹⁵⁷ The most fundamental of all rights is the right to life. Therefore, by inclining people to the right relations with others, justice guards the value of human life in society.¹⁵⁸ Consequently, the taking away of any innocent human life constitutes a grave injustice. The virtue of justice requires that everyone should preserve the lives of others. The drone operator who is just would do everything possible to avoid taking innocent lives.

Even though it is the prerogative of everyone to preserve the lives of others, there are certain circumstances as noted in the first chapter, where the taking away of life can be justified. Aquinas makes the distinction between just and unjust killing. The unjust killing of a human being by one or more private individuals is murder, which is a grave sin against commutative justice.¹⁵⁹ Aquinas is clear on the fact that nothing justifies the killing of an innocent person, no matter the good that accrues for the society.¹⁶⁰ However, he adds that where a public authority executes a person guilty of a heinous crime, it is not murder. In fact, he argues that such execution is a way of ridding the society of one considered a menace and a threat to the common good. He likens this to a man who by necessity have to amputate his arm or leg that is badly injured so as to save his life. The body of the community, Aquinas insists, must amputate seriously diseased members that threaten the whole

¹⁵⁵ De Natura Deorum, III, 38.

¹⁵⁶ CCC 1807

¹⁵⁷ ST II-II q.58

¹⁵⁸ Mattison, William C op. cit. page 70

¹⁵⁹ Paul J. Glenn (Commentary on ST II-II, a 64, a. 1)

¹⁶⁰ ST II-II, q. 64, a. 6,

group and its common life.¹⁶¹ More so, St. Thomas maintains that in the case of self-defense, killing can be justified if it is outside one's intention to defend himself. He argues that if in defending oneself against a murderous and unjust attack, one kills the attacker there is no murder, but blameless self-defense.¹⁶²

The drone pilot by the very nature of his operations frequently finds himself in situations where he would have to make decisions about the lives of others. While expected to value life and preserve the sacredness of human life, he would be faced with the reality of eliminating those who may threaten the lives of others and thus the common good. Yet, even when this has to occur, justice demands that this is done virtuously and not carelessly or callously. The drone pilot is bound by justice to respect and preserve the lives of those who are not threats to others. The concern however, is to what extent the drone pilot may be able to carry out his operations while keeping with the tenets of justice. Among other scholars who have raised concerns about the growing rise of young drone operators, Christian Enemark captured this fear when he observed that “the essential concern is whether young military personnel, ‘raised on a diet of video games’ and ‘removed from the human consequences of their actions’, will value the right to life, the ethical implication being that, without a proper appreciation of the value of human life, drone operators might be less capable of acting justly (eg. Refraining from indiscriminate violence) when extinguishing it.”¹⁶³

Courage is another of the four cardinal virtues. The *Catechism* defines courage, as:

The moral virtue that ensures firmness in difficulties and constancy in the pursuit of the good. It strengthens the resolve to resist temptations and to overcome obstacles in the moral life. The virtue of fortitude enables one to conquer fear, even fear of death, and to face trials and persecutions. It disposes one even to renounce and sacrifice his life in defense of a just cause.¹⁶⁴

Courage, like all virtues is not simply about a single act, it is not simply about one instantaneous act of bravery. Courage, like every virtue, is habitual. Toner asserts that “courage is character in action;

¹⁶¹ Paul J. Glenn (Commentary on (ST II-II, q. 64, a. 2)

¹⁶² Paul J. Glenn (Commentary on ST II-II, q. 64, a. 7)

¹⁶³ Enemark, Christian. Op. cit., 86

¹⁶⁴ CCC No 1808

it is a pattern; it is a settled disposition (a habitus) formed, fashioned, and developed over many years... courage is not episodic but enduring; it is not a note but a melody; it is not a matter of heroic minute but of a gallant life.”¹⁶⁵ Being courageous then is not just about carrying out a brave act today. Being courageous is in the character and not a single act.

The question of the demand of courage for drone pilots has been on the front burner in many academic arenas. There is the assumption that without physical risk there cannot be any legitimate courage. Hence, since the drone operators are far removed from the ground battle or the combat arena, they cannot be said to exhibit courage, and in fact lack even the opportunity to develop or exercise the virtue of courage.¹⁶⁶ If courage were all about physical risks, the above position would be valid. But the introduction of the Unmanned System in the battle field has led to a return to the Aristotelian notion of courage. Courage is not merely about physical risks; rather the task of the drone operator requires a deeper form of courage: moral courage.

In most cases, when people talk about courage, they refer more specifically to physical courage. Yet, we must distinguish between physical and moral courage. While physical courage is the willingness to face fear of bodily discomfort, injury, and death, moral courage comprises of the willingness to face and overcome fear of social and personal sanctions that may be incurred by doing what is right rather than what is popular, expected or even commanded.¹⁶⁷ Toner argues that “The courage to choose the ethical over the expedient, to serve the cause of principle over the desire of being popular-these are the heart and soul of sacred honor.”¹⁶⁸ At times, moral courage may even “prohibit physical courage.”¹⁶⁹ There are times when the courageous thing to do is to walk away from a situation and not to act. A soldier who asked to carry out an immoral act such as attacking an area that could cause harm to the lives of innocent civilians would need courage to resist such orders.

¹⁶⁵ Toner, James Hugh op. cit., 110

¹⁶⁶ Strawser, Bradley Jay op. cit., 89

¹⁶⁷ Ibid., 89

¹⁶⁸ Ibid., 119

¹⁶⁹ Ibid

Sometimes the bravest soldiers are not those who carry out risky orders from their commanders but those who resist immoral orders. In this case, moral courage prohibits what would have ordinarily been regarded as physical courage or bravery. St. Ambrose of Milan notes that, courage without justice is a lever of evil,¹⁷⁰ exemplifying the link between courage and justice. One can only be courageous in what is just, since courage is a virtue and not mere show of bravery. Courage then is not an end in and of itself, but it is a means of bringing about virtuous ends.¹⁷¹

Following the distinction between physical and moral courage, it is pertinent to note that while the drone pilot may not have the opportunity to exercise physical courage since he is safely removed from the battle field, he is daily challenged with the reality of exercising moral courage. To disobey an immoral order from a commander for the sake of protecting innocent lives is a great act of courage. To insist on doing the right thing instead of carrying out an evil order on behalf of either his commander or his country, knowing that this decision will not be well received by his commander or the country, is a great act of courage. Therefore, even though the drone operator is not physically in danger, he is in a different kind of danger that could be much more detrimental to him. He could be in a moral danger that would require courage to reclaim his freedom to do the good against the bad in opposition to the instructions of a bad leader. Conscientious objection remains a viable option open to the drone operator in situations such as this.

It requires great moral courage to move against the trend, to oppose evil and to stand for justice and truth. Seeing so many acts of bravery today, it can be argued that the world is never in short supply of physical courage; what the world of today is in short supply of is moral courage. Moral courage requires daring to be different for the sake of a good cause. The pursuit of *the good* can often times even pitch one against all others and the status quo. Just in the same way that soldiers on the battle field require physical courage, drone operators require moral courage. While soldiers at the battle front are expected to exhibit courage, Toner, using the case of the Vietnam War, opines

¹⁷⁰ Ibid., 114

¹⁷¹ Ibid

that “the lack of moral courage is likely to result in greater death and destruction than the want of physical courage.”¹⁷² Many lives have been saved for the simple reason that some courageous soldiers conscientiously objected to immoral commands.

Temperance is the virtue that inclines us to the right enjoyment of bodily pleasure and desire. It facilitates proper regulation of one’s actions, and desires related to sensual pleasurable activities so that they are reasonable and in accord with how things ought to be.¹⁷³ According to the *Catechism of the Catholic Church*:

Temperance is the moral virtue that moderates the attraction of pleasures and provides balance in the use of created goods. It ensures the will's mastery over instincts and keeps desires within the limits of what is honorable. The temperate person directs the sensitive appetites toward what is good and maintains a healthy discretion.¹⁷⁴

Hence, the virtue of temperance fittingly, like all virtues, leads us to desire to act properly and not poorly.

St Thomas maintains that temperance is both a special and general virtue “for ordinariness or moderation, which is the object of temperance, is found in all the moral virtues. Yet the virtue of temperance has a special phase of good in view: it holds back the appetites from inordinateness in their drive for what is most alluring.”¹⁷⁵ However, temperance is not simply the absence of disordered desires, but also the presence of well-ordered desires and emotions.¹⁷⁶

The virtue of temperance is needed in checking such pleasures as drinking and even the excessive desire for the pleasure that arises from leisurely activities such as video games. There is a form of pleasure that accompanies the playing of video games.¹⁷⁷ The virtue of temperance is required in checking excesses in this regard. But the fear among some critics of drone operation is that since the controller is modelled after a video game-like console so as to make it appealing to the

¹⁷² Ibid., 118

¹⁷³ Mattison, William C op. cit., 76

¹⁷⁴ CCC No 1809

¹⁷⁵ Paul J. Glenn (commentary on ST II-II, Q. 141, Art. 2)

¹⁷⁶ Mattison, William C op. cit., 87

¹⁷⁷ David J Linden Ph.D., Psychology Today, "Video Games Can Activate the Brain's Pleasure Circuits", October 25, 2011

<https://www.psychologytoday.com/blog/the-compass-pleasure/201110/video-games-can-activate-the-brains-pleasure-circuits-0>

young soldiers, who would use them,¹⁷⁸ there could be a transfer of the video game mentality to the operation of drones. In the virtual world of the video game there is always that thirst for action, for winning and, depending on the particular video game type, for killing the enemy and the visual satisfaction that it generates. Moreover, in video games, the death of the enemy does not bring about any form of sorrow or remorse. This thirst for action could sometimes find itself in the drone station. There could be some insatiable desire to derive contentment and bodily happiness from attacking some helpless people. Michael Haas, a flight instructor and a former senior airman in the US Air Force, claims to have been “non-judicially reprimanded by his superiors for failing a student who had expressed “bloodlust,” an overwhelming eagerness to kill.”¹⁷⁹ The virtue of temperance is indeed required in putting such use of lethal force for pleasure in check.

Furthermore, the virtue of temperance is required to check the excessive use of alcoholic substances. Haas also talks about the widespread use of drug and alcohol among some drone operators. He stated that some operators had flown missions while impaired. Drone operators, he maintains, would sometimes get intoxicated using bath salts and synthetic marijuana to avoid detection in possible drug testing.¹⁸⁰ While this may not be the norm, the fact remains that the job of a drone operator places him in charge of very critical decisions about human lives. Such decision requires great dedication and complete alertness. A drone operator who is temperate would not be addicted to alcohol or drink in excess. Temperance requires that the will has mastery over the instincts. To be under the influence of drugs or alcohol while flying a mission already impairs the decision making process. A drone operator who is addicted to alcohol or drugs will pose great danger to the lives of innocent people no matter the good policies and good information.

The cardinal virtues are indeed essential for the drone operator’s better operation. Without any one of them, the drone operators could become a disaster to others and his operation could

¹⁷⁸ Benjamin, Medea op. cit., 86

¹⁷⁹ Murtaza Hussain, Intercept: Former Drone Operators Say They Were “Horrified” By Cruelty Of Assassination Program, November. 19 2015

¹⁸⁰ Ibid

become counterproductive. The drone pilot does not have the legitimate authority to declare war and will most likely not be part of the authority necessary for the other *jus ad bellum* considerations. The major role of the operators come in the discharge of the *jus in bello* considerations. Yet, the operators ought to know the intention behind the war they are executing. They also need to know the legitimacy of such a declaration. But very importantly, the drone operators must have adequate knowledge of the *jus in bello* principles. A drone operator who does not know what the law requires concerning noncombatant immunity or the principle of proportionality becomes a threat to the lives of others.

Nevertheless, as discussed before, mere knowledge of the Just War principles is not adequate for the drone operators. In the execution of particular wars, the drone operators must be equipped with virtues, bearing in mind that they are charged with the responsibility of making “life and death” decisions. They, at the point of their operations, become custodians of the most valuable right of the people in the battle field, the right to life. Even when the drone operators are convinced that the *jus ad bellum* principles have been strictly followed in the declaration of the war they are executing or in the fight against terrorism, their actions must be carried out in a virtuous way. Aquinas explains that for a deed to be truly good, it has to be done in the right way.¹⁸¹

Even in the killing of a legitimate target, the drone operators must be guided by virtue knowing that it is the life of a human being that is being taken. The drone operator must be diligent in the discharge of his duties knowing that he owes justice to the families of the targets and his country would have to give account of his actions to God on the last day. Most importantly, the drone operators must be aware that even if they are detached from the victims of their attacks, they are not detached from their own actions. The drone operators either directly or indirectly are affected by their own actions. Since human actions affect who the operators become over time, there is no

¹⁸¹ Nelson, Daniel Mark. *The Priority of Prudence: Virtue and Natural Law in Thomas Aquinas and the Implications for Modern Ethics*. (University Park, Pa: Pennsylvania State University Press, 1992.), 81

doubt that drone operators by their actions or inactions are changing their character and consequentially, their personalities. Virtues are responsible not just for the goodness of one's actions but of the goodness of the agents in the same way that vices are responsible not only for the badness of one's actions but for the badness of the agents. In as much as virtues show who we are, cultivating a virtuous life is essential in the proper discharge of duties. The pilot who is virtuous will follow just instructions based on this predisposition to virtue and will not be forced into a vicious act like killing the innocent. In the movie, "Eye in the Sky", Aaron Paul, acting as the drone Operator refused to pull the trigger which would have led to the death of a young girl within the vicinity of the attack. He suspended the firing of the hellfire missiles until the young girl's chances of being alive after the strike has been reassessed. To achieve this, the radius of impact was recalculated and greater care was taken to protect this innocent civilian.¹⁸² Even though this is a movie, it represents what a virtuous drone operator could and should do. The drone operators in this movie chose not to bury the innocent girl in the ambiguous euphemism of collateral damage. They chose not to view her within the web of statistics and numbers but as a human who deserve to live. Actions or inactions in such critical moments are depicted in the "Eye in the Sky" have their consequences on the operators. In the next chapter we shall evaluate how the drone operator is affected either negatively or positively by his daily actions and how these actions ultimately lead him closer to or farther away from grace and become either detrimental or favorable to his salvation, making him a victim to his actions.

¹⁸² Brian Viner, Daily Mail, Eye In The Sky review: Dame Helen Mirren is convincing as a tough old soldier in tense intelligent thriller, 15th April 2016 <http://www.dailymail.co.uk/tvshowbiz/reviews/article-3541644/Eye-Sky-review-Dame-Helen-Mirren-convincing-tough-old-soldier-tense-intelligent-thriller.html#ixzz4JTUnulyc> (accessed august 30th, 2016)

CHAPTER FIVE

THE UNIQUE VICTIMHOOD OF THE DRONE OPERATOR

There is always a sad twist to every war. While unleashing destruction on the enemies, including at times not only combatants but also the civilians, war also affects, in catastrophic proportion, those doing the killing and fighting. The fathers of the Second Vatican Council point out that “whatever is opposed to life itself, such as any type of murder or genocide...whatever violates the integrity of the human person, such as mutilation...and whatever insults human dignity, such as subhuman living conditions, arbitrary imprisonment and deportation are infamies that do not only poison the human society but do more harm to those who practice them than those who suffer from the injury”.¹⁸³ Whereas this reality is very much indisputable in the case of conventional wars, the negative effect of drone warfare on the operators remains a still largely unasked question. While the distance created by drones has brought military advantage to the nation that utilizes it, studies now indicate that drone operators are vulnerable to their own operations. Hence, while being physically protected from harm in the battle field, the drone operator is not immune to certain other kinds of injuries associated with war. One of the paradoxes of drones is that, even as they increase the distance between the operators and the targets, they also create another form of proximity. In this sense, drone wars also become very personal. No other form of war makes it so very personal for the one fighting it than drone warfare.

The victimhood of the drone operators originates from the very unique form of intimacy which drone warfare creates between the operators and the targets. Contrary to the view that the remoteness of this kind of war provides a safe haven for drone operators, with the attending consequence of minimalizing war to a simplistic video game operation, there are strong indications that what goes on in the various drone stations manned by drone pilots and sensor operators is far more serious and has a far greater impact than playing a video game. In this chapter we shall

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consider the video game analogy to drone operation and how the very nature of drone warfare makes the operators more susceptible to certain forms of combat injuries than any other kind of warfare.

The Virtual World of the PlayStation and the Real World of the Drone Station

Many critics of drone warfare argue that there is no valor in sitting behind computer screens and killing someone thousands of miles away who has no scintilla of knowledge that he is a target. Today, labels such as armchair heroes, PlayStation warriors, and so on, have been used to describe drone operators. Drone operation itself has been described by some critics as no more than video gaming. Christian Enemark describes drone operators as “disembodied warriors.”¹⁸⁴ This identification is based upon the argument that the human body is an essential part of his action. The drone operator, since he is not physically present at the scene of his actions, becomes a disembodied warrior. Some other critics simply describe drone operators as “video game warriors”. This label draws from the similarity between the design of video games and that of a typical drone cockpit. Some articles on Unmanned Systems report that the control units for drone systems have been deliberately designed around the controls for a type of video game console known as the PlayStation or around a “Gameboy” controller, another type of video game interface, in order to take advantage of potential operators’ existing familiarity with these controls.¹⁸⁵ Speaking to Peter Singer, a Robotic Expert working with the Marines, remarked: “we modeled the controller after the PlayStation because that’s what these eighteen, nineteen-year-old Marines have been playing with all of their lives.”¹⁸⁶

It is not surprising then that critics of drone warfare have argued that there is a tendency for the operators to mistake their drone activities for playing video games. Philip Alston, the United Nations Special rapporteur on Extrajudicial, Summary or Arbitrary Executions, and Hina Shamsi, of the American Civil Liberties Union criticized the “PlayStation mentality” created by drones which

¹⁸⁴ Enemark, Christian. Op. cit., 85

¹⁸⁵ Graham, Stephen. 2006. America’s robot army. *New Statesman* 135 (4796): 12-15.); Kenyon, Henry S. 2007. *Airborne Testbed Opens New Possibilities*. *Signal* 61 (9): 47-9.)

¹⁸⁶ Benjamin, Medea. Op. cit., 86

turn killing into a video game. They argued that “young military personnel raised on a diet of video games now kill real people remotely using joysticks. Far removed from the human consequences of their actions, how will this generation of fighters value the right to life?”¹⁸⁷ There seems to be some support for this claim. Sharing his experiences of the Iraq war fought from a drone station in Qatar, a drone operator had remarked: “It’s like video game. It can get a little bloodthirsty. But it’s...cool”.¹⁸⁸ A remark such as this suggests the existence of the so called PlayStation mentality syndrome. As Benjamin Meadea pointed out, this can greatly blur the line between the real and the virtual worlds.¹⁸⁹ It is in order to counter thoughts such as the above that Major Sam Morgan, a trainer of Predator Pilots in Nevada, would state, “We have to impress upon them that they are not just shooting electrons. They’re killing people.”¹⁹⁰ Indeed at no point should the virtual world of the video games be confused with the real world faced by the operators.

Yet, in spite of the arguments that support the assumption that the nature of drones could lead to a PlayStation mentality among operators, many drone operators and military personnel have argued very powerfully against any assumption that drones create a PlayStation mentality to killing. They also oppose any suggestion that the geographical distance created by drone warfare could lead to a depersonalization of the drone operators and the serious consequence of dissociating the operators from the human cost of the killing they are involved in. Many drone operators are offended by the claim that they are not connected to the victims of their actions. On the contrary, they testify that the very nature of drones creates an inter-connectivity between the drone operator and his target. Because the drone operator would in some cases follow his target for a very long time, sometimes, even for weeks or more, he gets to know the target to a point that his life becomes almost immersed

¹⁸⁷ Philip Alston and Hina Shamsi: *A killer above the law? Britain's use of drones in the war in Afghanistan must be in accordance with international law*, 8 February 2010
<http://www.theguardian.com/commentisfree/2010/feb/08/afghanistan-drones-defence-killing> (accessed 5th October, 2015)

¹⁸⁸ SINGER, P. W. (2009). *Wired for war: the robotics revolution and conflict in the twenty-first century*. (New York, Penguin Press), 332

¹⁸⁹ Benjamin, Meadea. *Op. cit.*, 86

¹⁹⁰ Bender, Bryan. 2005. *Attacking Iraq, from a Nev. Computer*. Boston Globe, April 3, A6.

in the life of his target. As such, drone operators most times also become unseen victims of the fuller repercussions of their actions.

Kyle Grayson, a Senior Lecturer in International Politics at Newcastle University, United Kingdom, argues that the idea that piloting drones is “as mindless as playing a video game is...based on an ill-informed understanding of video games”. He maintains that it also ignores the extensive empirically-based literature on how it becomes possible for people to kill one another in combat and fundamentally misunderstands the experience of piloting drones in relation to the experience of playing video games. Consequently, he concludes, “the ‘PlayStation mentality’ critique does not just miss the target, but it also produces collateral damage by trivializing the complex dynamics underpinning technologically enabled killing and what makes drone strikes possible”.¹⁹¹ More so, Grayson notes that video games are never “numbing agents geared towards mindless pursuits. Video games are immersive and embed the players into a world that is meaningful to them”. Even though video games can produce feelings of pleasure, anxiety and other forms of emotions such as sadness and elation, they are nevertheless also able to produce very effectively a sense of purpose and coordination among dispersed players.¹⁹² Grayson strongly maintains that “while video games may be virtual, they produce a sense of presence, a feeling that the player is, in reality, ‘there’ and that what transpires has meaning”. And “If video games were unable to generate a sense of attachment and meaningful consequences for players within the world of the game, or even beyond, few would play them”.¹⁹³ Therefore, even if the suggestion that what drone pilots do can be likened to a video game, it would still be overly simplistic to imagine that video game players are completely detached from their activities.

A retired U.S. drone operator opposes very strongly the view that all they do is sit and play video games. Slim, (his Air Force call sign) remarks: "People think we're sitting here with joysticks

¹⁹¹ Kyle Grayson, E-International relations, Drones and Video Games. Feb 25 2014, <http://www.e-ir.info/2014/02/25/drones-and-video-games/>

¹⁹² Ibid

¹⁹³ ibid

playing a video game, but that's simply not true, these are real situations and real-life weapons systems. Once you launch a weapon, you can't hit a replay button to bring people back to life".¹⁹⁴ Even though the drone operator in a combat mission is physically removed from the combat zone, Slim argues that he is aware that "While the enemy is the enemy, you still understand that they are a real person and to extinguish a person's life is a very personal thing. While physically we don't experience the five senses when we engage a target — unlike [how] an infantryman might — in my experience, the emotional impact on the operator is equal."¹⁹⁵ Another drone operator denying the equation between drone operation and video games says drone operation is anything but Star Wars games: "The taking of human life is not something to be considered lightly. OK, they are bad guys we are killing, but they are still human beings."¹⁹⁶ He also criticizes the suggestion that the use of drones translates into leaving moral judgments to machines. "The plane cannot start, cannot fly and cannot release a weapon without us doing it. Human beings are in the cockpit – exactly the same as when I was flying a Tornado. We just happen to be 8,000 miles away from the plane," he says.¹⁹⁷ Rob Blackhurst, who recounts his visit to the Kandahar Airfield in southern Afghanistan, debunks the assumption that drone operators are youngsters who do not take very seriously the nature of their assignment. He observes: "From my experience at Kandahar this vision of teenage warriors seems far-fetched: the Reaper pilots I met were approaching middle age, softly spoken and sober about the life-and-death decisions with which they were charged."¹⁹⁸ Indeed many of the drone operators clearly understand the enormity of the tasks they are required to carry out and they take this very seriously.

The audio-visuals and telecommunications technologies that are part of the drone systems

¹⁹⁴ Denise Chow: Livescience: Drone Wars: Pilots Reveal Debilitating Stress Beyond Virtual Battlefield, November 05, 2013

¹⁹⁵ Ibid

¹⁹⁶ Rob Blackhurst, Drone Pilots Say Their Job Is Not Like A Video Game, The Telegraph, Sep. 24, 2012, (Business insider) accessed, December 30th, 2015 <http://www.businessinsider.com/drone-pilots-say-their-job-is-not-like-playing-a-video-game-2012-9> accessed, December 30th, 2015

¹⁹⁷ Ibid

¹⁹⁸ Ibid

make it very possible for the drone operator who is physically removed from the combat arena to be differently embedded into the battle-space in a very spectacular way. Thus, “while the drone operators’ experiences may be mediated by “sensing technologies and video screens” they are still very much attached and not detached from the battle-space.”¹⁹⁹ According to Capt. Steven Rolenc, spokesman for Predator operations at Nellis Air Force base, when “you put your hands on the controls and your eyes on the screens, you feel as though you’re flying over Iraq or flying over Afghanistan.”²⁰⁰ You get yourself into that reality. It’s not a video game. It’s the real deal.”²⁰¹ Similarly, Air Force Major Shannon Rogers claims that, “Physically, we may be in Vegas, but mentally, we’re flying over Iraq. It feels real.”²⁰² The consequences of this kind of “presence” are enormous.

Grayson argues that the difference between the soldiers on the battle ground and the drone operator is that they are able to experience and interpret their experiences of war through “perspectives offered by video games”.²⁰³ With the almost God-like overview of the battle ground, many drone pilots report cases of traumatic stress disorder as will be discussed below. Dr. Robert Sparrow argues that there is a certain element in drone warfare that makes it more difficult for the operators to deal with various kinds of consequences that are a corollary to the nature of drone wars. In conventional warfare, the larger context of being physically present in the theatre of operations may allow fighters to prepare for combat through a process of anticipation which makes reference to local circumstances and to deal with them afterwards through conversation and interaction with others who may have shared similar experiences. This is not the case with drone warfare; fighting a war in a country that one has never set foot in, alongside people one has never met, may be uniquely

¹⁹⁹ Kyle Grayson, E-International relations, Drones and Video Games. Feb 25 2014, <http://www.e-ir.info/2014/02/25/drones-and-video-games/>

²⁰⁰ Sherman, Jason. 2005. The Drone Wars. *Bulletin of the Atomic Scientists* 61 (5): p. 35),

²⁰¹ *Ibid*, 28-37.

²⁰² Donnelly, Sally B. 2005. Long-distance warriors. *Time Magazine*, December 4.

²⁰³ Kyle Grayson *op. cit.*

difficult in terms of the opportunities for soldiers to “process” their experiences.²⁰⁴ Drone operators often must view the results of their actions for a sustained duration and level of detail not common to other forms of combats. Lieutenant Colonel Bruce Black, a former Air Force drone pilot says that typically, drone pilots watch their targets for very long period of time, know them intimately, know where they are and what is around them.²⁰⁵ In fact, they even know their neighbors.

Drone warfare has brought a new perspective to war. Rather than become a source of emotional detachment, the fact that operators lack immediate presence at the battle front has generated even more terrifying consequences for them. Comparing his experience with that of fighter pilots, a drone operator remarked: “when the face of your enemy was staring back at you and in high definition your entire system is charged...No other pilots got to see the targets like we do. Most fighter pilots dropped only a couple of times on a deployment, some not at all. When they did hit a target, they had weeks or months remaining in theatre to come to terms with their actions.”²⁰⁶ Col. Pete Gersten, commander of the 432nd Air Expeditionary Wing at Creech observes “one of the great advantages of drones is the ability to loiter. But this also means crews spend a lot of time watching the destruction of war. Unlike an F-16 pilot who would engage the enemy and then return to base, the drone crews do lengthy battle damage assessments”.²⁰⁷ Fighter pilots rarely see the entirety of their mission. In fact it is impossible for a fighter pilot to see the whole engagement. In most cases they simply respond to a call and drop some bombs on the target and disappear. As a drone operator once noted:

The closest they got to the fight was strafing runs and the occasional flash from the bomb or missiles as it passed their windscreen. Their proximity to death and violence stirred their blood, but the images in their targeting pods were tiny and fuzzy compared to our high def-

²⁰⁴ Dr Robert Sparrow: *Building a Better WarBot: Ethical issues in the design of unmanned systems for military applications*. (Forthcoming in: Science and Engineering Ethics) School of Philosophy and Bioethics, Monash University, Australia. Page 9

²⁰⁵ Salun: Friday, March 6, 2015

²⁰⁶ McCurley, T. Mark, and Kevin Maurer. 2016. *Hunter killer: inside the lethal world of drone warfare*. (Sydney: Allen & Unwin),134

²⁰⁷ Megan McCloskey, The war room: Daily transition between battle, home takes a toll on drone operators, STARS AND STRIPES, October 27, 2009, <http://www.stripes.com/news/the-war-room-daily-transition-between-battle-home-takes-a-toll-on-drone-operators-1.95949>), accessed August 30, 2016

Pods, keeping them remote to effects on the ground. Our targeting pods not only showed us everything, but also lingered over the carnage, searing the images into our brains. Our experiences was far different from that of the fighters.²⁰⁸

The drone operators see the before, the during, and the after. This is what makes this kind of killing very harmful to the operators. In some cases, drone operators watch their targets for days, and even weeks. They get involved in the personal life of the targets. They come to know the daily routines not only of the potential target but of their families and neighbors. In most drone attacks, the drone operator becomes, as it were, a virtual neighbor to their target, learning the day to day life of the community in which they will carry out their mission. Nancy Cooke, a professor of cognitive science and engineering at Arizona State University's College of Technology captured this quite aptly when she remarked: "When you operate a remotely piloted aircraft, even though you're there virtually, you have a lot of information about what's going on, on the ground."²⁰⁹ Due to this this level of knowledge and virtual attachment to the target and his surrounding, Cooke argues that drone pilots may suffer more emotional impact by killing at a distance because of how closely they have to monitor the situation before, during and after the attack.²¹⁰

To take the life of a target after being 'personally close' to him and his family, to watch how his wife and children mourn his death and the degrees of emotions flowing from their hearts through the tears that gush from their eyes can leave a drone operator completely devastated and emotionally drained. This kind of bond established between the drone operator and the family of the target can become a great source of psychological and moral pain. It could lead to even a sense of betrayal. The drone operator does not only take away the life of an enemy he has come to know, he has taken away the joy of a family; he may also feel that he has taken the life of a virtual friend. He has taken away the life of one whose world he has entered and established some sense of intimacy with. This is what places the drone operator in the position of victimhood. The increasing number of drone operators who report Post Traumatic Stress Disorder and other sociological, psychological and moral

²⁰⁸ Ibid 134

²⁰⁹ Denise Chow, op cit

²¹⁰ Ibid

complications cast great doubt on the assumption that drone operation is simply like playing video game and that drone pilots are video-game warriors. That drone operators show these signs mean that they are more involved than many critics of drone operation would think.

Many journalists today who cover violent events report various degrees of traumas including Post-traumatic Stress Disorder. Even though their lives may not be physically in danger, the fact of simply covering such events put them at risks. Among others, some journalists report long standing symptoms of fear, numbing, guilt, nightmares, substance abuse, sleep difficulties, intrusive recollection, irritability, mistrust of others, isolation, avoidance of trauma-related reminders, hypervigilance, and exaggerated startle response to gruesome or harrowing assignments.²¹¹

Kevin Carter a freelance photographer and South African native winner of Pulitzer prize in 1994, for his photograph of a vulture stalking a starving girl who collapsed on her way to a feeding station in Southern Sudan never recovered from the trauma and shock of seeing such a horrible incident. He would eventually commit suicide just two months after that encounter. In the suicide note he left under his knapsack, he wrote, "I'm really sorry. The pain of life overrides the joy to the point that joy does not exist". He also described being depressed and "haunted by the vivid memories of killings and corpses and anger and pain...of starving or wounded children, of trigger-happy madmen". James Nachtwey, a photographer for Magnum Photo Agency who knew Kevin Carter personally would remark that "every photographer who has been involved in these stories (of extreme human suffering) has been affected. You become changed forever. Nobody does this kind of work to make themselves feel good. It is very hard to continue".²¹² If by covering combat events journalists are able to show the above symptoms, there is no doubt that drone operators who 'stalk' their targets for days, weeks and even months would be prone to more traumas. More so, while the journalist would in almost all cases not be responsible in any way for the cause of the horrific

²¹¹ Newman, Elana, Roger Simpson, and David Handschuh. "Trauma Exposure And Post-Traumatic Stress Disorder Among Photojournalists." *News Photographer* 58, no. 1 (January 2003): 4. Academic Search Complete, EBSCOhost (accessed August 20, 2016).

²¹² Ricchiardi, Sherry, and Tom Gerczynski. 1999. "Confronting the horror." *American Journalism Review* 21, no. 1: 34. Academic Search Complete, EBSCOhost (accessed September 8, 2016). page 38

incident he is covering, the drone operator is likely to have participated in the cause of the incident, either by releasing the missile or by guiding the missiles with a laser. Consequently, the argument that drone operator are incapable of experiencing traumas or moral injury simply because they are only watching through their computer screens lacks merit.

From Post-Traumatic Stress Disorder (PTSD) to Moral Injury, the High Cost of Drone Warfare

Various terms have been used over the years to describe the kind of pains soldiers go through during and after combat. After the American Civil War, “Soldier’s heart” was used to describe the psychological problems of soldiers. In World War I “shell shock” was used and “Combat fatigue”, in World War II.²¹³ Today, the most prevalent technical term used to identify the specific kind of trauma that soldiers go through after engaging in combat is Post traumatic Stress Disorder (PTSD). The recognition of Post-traumatic Stress Disorder as a legitimate psychiatric condition dates back to 1980 when it was included in the Diagnostic and Statistical Manual of Mental Disorders (DSM IV).²¹⁴

The National Center for PTSD, U.S. Department of Veterans Affairs defines Post Traumatic Stress Disorder (PTSD) as: “An anxiety disorder that can occur following the experience or witnessing of a traumatic event. A traumatic event is a life-threatening event such as military combat, natural disasters, terrorist incidents, serious accidents, or physical or sexual assault in adult or childhood.”²¹⁵ Various symptoms are associated with PTSD. These symptoms are more broadly grouped into three: Reliving, Avoiding, and Increased Arousal. Victims of PTSD repeatedly relive the ordeals through thoughts and memories of the traumas. These may be in the form of night mares, flashbacks or hallucinations. Avoiding entails the tendency to isolate oneself, avoiding people, places

²¹³ Weaver, Andrew J., Laura T. Flannelly, and John Preston. *Counseling Survivors of Traumatic Events: A Handbook for Pastors and Other Helping Professionals*. Nashville: Abingdon Press, 2003, page 150

²¹⁴ Nnewman, Elana, Roger Simpson, and David Handschuh. "Trauma Exposure And Post-Traumatic Stress Disorder Among Photojournalists." *News Photographer* 58, no. 1 (January 2003), page 6

²¹⁵ Mental Health America: Post-Traumatic Stress Disorder, <http://www.mentalhealthamerica.net/conditions/post-traumatic-stress-disorder> (Accessed 30th December, 2015)

or situations that may remind one of the traumas. This can lead to a feeling of detachment from family or friends, as well as loss of interest in activities that one once enjoyed. Increased arousal as a category of PTSD could be expressed in excessive emotions, problems in relating with others, outbursts of anger, being easily startled or difficulty falling or staying asleep.²¹⁶

Many factors play a part in whether a person will suffer from PTSD. Some of these are risk factors which could include living through dangerous events and traumas, seeing people hurt or killed, having a history of mental illness or feeling horror, helpless, or extreme fear. Other factors, called resilience factors, include feeling good about one's own actions in the face of danger, finding a support group after a traumatic event, seeking out support from other people, friend and family and having a coping strategy, or a way of getting through the bad event and learning from it, can help reduce the risk of the disorder.²¹⁷ It is important to note that not everyone who lives through a traumatic event gets PTSD. There are several factors that contribute in the presence or absence of this disorder.

Drone operators are not mere technicians operating various components of a machine. Even though they are physically detached from combat arena, they are obviously involved in combat. In various ways and at various times he makes decisions that affect the lives of others. These decisions either to act or not to act come with consequences which can be both immediate and remote. These consequences manifest through various symptoms which studies show are characteristic of Post-Traumatic Stress Disorder.

Over the years, there have been studies carried out to ascertain the prevalence of this kind of disorder among drone operators. The Armed Forces Health Surveillance Center carried out a study in 2013 in which they reported that despite working in relative safe conditions and air-conditioned

²¹⁶ Joseph Goldberg, MD : Posttraumatic Stress Disorder, WebMD Medical Reference: Mental Health Center, February 11, 2014 <http://www.webmd.com/mental-health/post-traumatic-stress-disorder?page=4> (Accessed January 20th, 2016)

²¹⁷ National Institute for Mental health: Post-Traumatic Stress Disorder: <http://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml> (Accessed January 20th, 2016)

facilities, drone pilots suffer high levels of stress and fatigue.²¹⁸ They were also found to suffer the same rate of post-traumatic stress disorder and other mental conditions as other combat pilots.²¹⁹ The report corroborates an earlier study that was carried out in 2011 which was coauthored by Wayne Chappelle. It was designed to identify areas of high stress within the Airforce Drone Program and was carried out among approximately 1,400 members of the Air Force. This included 600 noncombatant airmen and 864 operators of Predator, Reaper and Global Hawk drone aircraft.²²⁰ The participants were asked to rank their level of stress on a scale from 0 to 10, with 10 representing feeling extremely stressed. The study revealed that 46 percent of Reaper and Predator pilots reported “high operational stress” and from other questionnaires, Chappelle found that 17 percent of Predator or Reaper drone operators, and 25 percent of Global Hawk operators, show signs of "clinical distress." This would include symptoms such as depression, anxiety and other symptoms that interfere with job performance or disrupt family life.²²¹ Jean Otto and Bryant Webber of the Armed Forces Health Surveillance Center and the Uniformed Services, University of the Health Sciences, suggest that there could be a higher number of drone operators undergoing post-traumatic stress disorder. In an article published by Tech. Sgt. Nadine Barclay, 432nd Wing/432nd Air Expeditionary Wing Public Affairs, on the Creech Air Force Base, Nevada, website, he reports that "according to a 2014 paper from the United Air Force School of Aerospace Medicine, studies have shown that 4.3 percent of Air Force RPA operators report symptoms of post-traumatic stress disorder".²²² However, there could be artificial underreporting of the concerns of the pilots “due to the career-threatening effects of [mental health] diagnoses, [which] include removal from flying status, loss of flight pay, and diminished competitiveness for promotion.”²²³ These challenges could discourage many

²¹⁸ McCaskill: Drone pilot stress is unprecedented: By Travis J. Tritten, Stars and Stripes Published: June 25, 2015

²¹⁹ Ibid

²²⁰ Denise Chow, op cit.

²²¹ Ibid

²²² Tech. Sgt. Nadine Barclay: Busted, top 10 RPA myths debunked, published in CREECH AIR FOCE BASE, Nevada website, October 09, 2015 <http://www.creech.af.mil/News/ArticleDisplay/tabid/7026/Article/669932/busted-top-10-rpa-myths-debunked.aspx> (accessed May 5th, 2016)

²²³ Pratap Chatterjee, TomDispatch: Is Drone Warfare Fraying at the Edges? (March 5, 2015)

potential drone operators.

There are some other reasons responsible for the hesitance in acknowledging that drone operators can and do have post-traumatic stress disorder. Politically, it would mean granting drone operators the same status and benefits as regular combat soldiers who suffer PTSD.²²⁴ A Major in the US Army who spoke to me anonymously talked about the slippery slope consequences of such acknowledgement. Once it has been established that drone operators are capable of experiencing PTSD from their operations and some operators are granted some kind of benefits, other operators who may want to receive such benefits may be tempted to claim to suffer such injuries too. There is also the question of warrior syndrome. People who report PTSD or other kinds of invisible wounds of war could be seen as losers and not tough enough for military job which is expected to be for the tough and strong.

While PTSD could result from many factors as detailed above, Col. James Cluff notes that the fear of occasionally killing civilians is one of the greatest causes of stress for drone pilots.²²⁵ Drone operators who see both the before and the after of their actions know that in some cases innocent victims are caught up in their killings. Even though technically these innocent victims are simply categorized as collateral damage, when the drone operator goes home to his family, he goes home with the raw images of what has transpired during the day. Some feel guilty knowing that they have deprived others of the opportunity to live. Some go home knowing that they have harmed children of their enemies, children who could be the same age as their own children, depriving them of the opportunity to go to school, be loved, or taken care of by their parents who may have been killed accidentally. When a drone operator mistakenly kills a child in a mission, he does not go home thinking of “collateral damage,” he goes home saying to himself: I have killed a child. The following

²²⁴ Reuters, *Pentagon scraps medal for drone pilots after uproar*: April 10, 2013.; <http://www.reuters.com/article/us-usa-pentagon-medal-idUSBRE93E12V20130415>

²²⁵ Christopher Drew and Dave Philipps: *As Stress Drives Off Drone Operators, Air Force Must Cut Flights*, HILIPPSJUNE 16, 2015 (New York Times: http://www.nytimes.com/2015/06/17/us/as-stress-drives-off-drone-operators-air-force-must-cut-flights.html?_r=0 (Accessed January 20th, 2015)

witness of a drone pilot which most often reflects the experience of many others captures this reality very succinctly:

I was almost home when it hit me. Sitting at a traffic light, I was overtaken by the idea that I'd taken a life. It wasn't the first one, but this one stuck with me because of the intimacy of it. My other shoots were in defense of troops under fire...but this one was different. The engagement was never a "him or me" scenario. There was no way a facilitator could harm me. I had all the power. He wasn't shooting at American troops at the time. He was on the phone with his wife. I knew his name. I'd followed his every move for more than a month.²²⁶

Former drone operator Brandon Bryant who was interviewed by KNPR, a non-commercial radio station in Las Vegas, talked about his experience which was very symptomatic of post-traumatic stress disorder. "I stopped sleeping because I was dreaming in infrared, white hot, black hot, the same type of filters I would see at work. It was like I couldn't escape myself, he said. He also adds: "I felt like I was haunted by a legion of the dead. My physical health was gone, my mental health was crumbled. I was in so much pain I was ready to eat a bullet myself".²²⁷ Heather Linebaugh, a former drone imagery analyst, argues that even though she may not have been on the ground in Afghanistan, simply watching parts of the conflict in great details on a screen for days on end provided her with great insight about the grave dangers faced by drone operators who sit night and day watching the effects of their actions:

I know the feeling you experience when you see someone die. Horrifying barely covers it. And when you are exposed to it over and over again it becomes like a small video, embedded in your head, forever on repeat, causing psychological pain and suffering that many people will hopefully never experience. UAV troops are victim to not only the haunting memories of this work that they carry with them, but also the guilt of always being a little unsure of how accurate their confirmations of weapons or identification of hostile individuals were.²²⁸

Linebaugh also confirmed that two of her colleagues had committed suicide within one year of leaving the service.²²⁹

²²⁶ McCurley, T. Mark, and Kevin Maurer. Op. cit.,134

²²⁷ Joe Schoenmann: KNPR Radio Former Nellis AFB Drone Operator On First Kill, PTSD, Being Shunned By Fellow Airmen <http://knpr.org/knpr/2015-01/former-nellis-afb-drone-operator-first-kill-ptsd-being-shunned-fellow-airmen> (accessed Jan 25, 2015)

²²⁸ Heather Linebaugh the Guardian, Sunday 29 December 2013, <http://www.theguardian.com/commentisfree/2013/dec/29/drones-us-military> (accessed 15th January, 2016)

²²⁹ Chris Woods: Drone warfare: life on the new frontline, The Guardian, Tuesday 24 February 2015.

<http://www.theguardian.com/world/2015/feb/24/drone-warfare-life-on-the-new-frontline> (Accessed 15th January, 2016)

There is evidence that suggests not all drone operators feel the same way about their missions. A couple of drone operators indeed enjoy the work they do and defend their role in targeted killings. In fact, they see it as a mission that has to be accomplished for the world to be safer and better. Janet Atkins, who remotely logged more than 2,100 drone combat hours above Iraq and Afghanistan, maintains: “We’re not killing people for the fun of it. It would be the same if we were the guys on the ground, you have to get to [the enemy] somehow or all of you will die.”²³⁰ Former drone pilot, Bruce Black, speaking to his hometown newspaper in New Mexico touted: “I was shooting two weeks after I got there and saved hundreds of people, including Iraqis and Afghans.”²³¹ It is therefore inaccurate to assume that all drone operators show symptoms of Post-Traumatic Stress Disorder. Yet, while this is not to deny the fact that many do experience this condition, drone operators may also show signs of an even worse condition. There is a growing evidence that show that the effects of drone war go beyond the diagnostic criteria of Post-Traumatic Stress disorder. Many drone operators today suffer what has come to be known as “Moral Injury”. For some scholars, PTSD, as officially defined, rarely wrecks veterans’ lives or crushes them to suicide. Shay argues that “moral injury does both.”²³² Moral Injury is capable of far deeper consequences than PTSD.

There is a great distinction between PTSD and moral injury. While PTSD deals more with emotions of fear, anxiety, shock and nightmarish experiences often associated with unpleasant events of the past, moral injury presents itself in the form of emotions such as shame and guilt that are often connected with one’s beliefs and conscience. When Brayant, in narrating his first kill as a drone pilot says, “I really have no fear, it’s more like I’ve had a soul-crushing experience. An experience that I thought I’d never have. I was never prepared to take a life,”²³³ he was not only talking about the fear associated with an unpleasant event. This is not simply about fear and shock; it is more of shame and

²³⁰ Ibid

²³¹ Pratap Chatterjee, op cit.

²³² SHAY, J. (1994). *Achilles in Vietnam: combat trauma and the undoing of character.* (New York, Atheneum, 2012), 58

²³³ Matthew Power, *Confessions of a Drone Warrior*, GQ Magazine, October 22, 2013, <http://www.gq.com/story/drone-uav-pilot-assassination> (accessed 20th January, 2016)

guilt which are symptomatic of Moral Injury. Moral Injury is also very closely related to injury done to one's conscience. It can result from killing or injuring others or from witnessing such an event without intervening. Camilo E. Mejia an Iraq War Veteran, in distinguishing PTSD and Moral Injury says:

Conscience is the most secret place where we can see the unwritten law of morality...when I opened fire that day, I violated that law and desecrated the inner most sanctuary of my being. As I observed that young man through the sight of my rifle, I was staring at a point of no return, the very rubicon of my life, and I crossed it. My moral injury is the pain I inflicted upon the very core of my being when I took something I could never give back.²³⁴

The concept of Moral Injury is attributed to the clinical psychiatrist Jonathan Shay, who in his book *Achilles in Vietnam* traces the idea back as far as the Trojan War. He points out that "the mechanisms of death may change—as intimate as a bayonet or as removed as a Hellfire—but the bloody facts, and their weight on the human conscience, remain the same."²³⁵ The term moral injury describes the pain and distress that arises from adverse moral choices soldiers make in war.

Shay defines moral injury as “the betrayal of what is right, which is an essential part of any combat trauma that leads to lifelong psychological injury.”²³⁶ Tobias Winright defines it as a “Debilitating sense of shame and guilt that soldiers experience because of actions they have done or observed in war.”²³⁷ Expanding on these views, Brett Litz, a veteran psychologist, and his colleagues present morally injurious experiences as “perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations.”²³⁸ Alice Lynd explains that “when men and women in the military believe they did or saw something that offends their deeply held sense of right and wrong, it can create inner conflict and self-blame, and shake up their moral foundation. They may feel that what they did or saw is unforgivable. They experience

²³⁴ Alice Lynd , Moral Injury and Conscientious objection: saying no to military service, (<http://historiansagainstar.org/resources/militaryservice.pdf>)

²³⁵ Matthew Power, op. cit.

²³⁶ Shay J. op. cit., 20

²³⁷ Winright, T. L., & Johnston, L: *Can war be just in the 21st century?: ethicists engage the tradition*. (Maryknoll, New York : Orbis Books, 2015), 170

²³⁸ Moral Injury in Veterans of War: The National Center for PTSD, PTSD Research Quarterly, Volume 23/No1, 2012 <http://www.ptsd.va.gov/professional/newsletters/research-quarterly/v23n1.pdf>

“moral injury”.²³⁹

The religious beliefs, personal moral values and even character of the operator determine to a very large extent the degree of Moral Injury experienced. A person of good character is bound to feel more moral pain either in the form of guilt, shame, anguish or remorse after carrying out an act that has resulted in someone else’s suffering, injury or death, even if entirely accidental or unavoidable. Moral injury then is seen as “a wound suffered by a self-reflective and conscientious moral agent.”²⁴⁰ Many of the drone operators, especially those that are affiliated with the Christian faith, in most of their testimonies use religious terms to describe the deep pain they feel within. A more critical analysis of these testimonies reveals even much deeper injury than what we consider as Moral Injury. The testimonies of many drone operators today point to another kind of danger that arises from drone-induced combat trauma. Possibilities of what may be called spiritual trauma is beginning to emerge.

Many drone operators today point to a much deeper injury that cannot be seen or addressed by the conventional/regular kind of care given to operators who show signs of Moral Injury. Injuries to the soul are not discoverable through medical procedures, nor are they healed through basic psychiatric evaluations nor counseling. The injuries experienced by the drone operators can be grouped into psychological, moral and spiritual. Because much attention has been given already to the psychological and moral, I shall give more attention to the spiritual in the next chapter.

²³⁹ Alice Lynd , Moral Injury and Conscientious objection: saying no to military service, page 5 (<http://historiansagainstawar.org/resources/militaryservice.pdf>)

²⁴⁰ Chris J. Antal: *Moral injury, soul repair and creating a place for grace*, Kathy Winnings (Unification theological seminary, Barrytown, New York, USA), 384

CHAPTER SIX

BEYOND MORAL INJURY: SOUL WOUND AND REPAIR

Human actions do not remain only at the level of the body. Theological anthropology and philosophy hold that there is an intrinsic connection between the human body and the soul such that whatever happens to the body affects the soul. From this hylemorphic point of view therefore, “matter alone cannot tell the whole story of man. Such a story reduces the human being to nothing more than a mechanized aggregate of material components. The form of the human being, the soul completes the story of man.”²⁴¹ Aquinas maintains that since the body is proportionate to the soul, the defects of the soul redound into the body, and vice versa.²⁴² The fact that human beings feel the sense of shame after carrying out certain physical human actions is existential evidence that our body is not detached from our soul. Shame, guilt and regret are not physical actions, but they do result from physical actions. When drone operators make wrong choices that cause the death of innocent people, especially women and children, some operators can and do experience injuries that transcend the physical.

The phenomenon of Moral Injury and its impact is still very much a subject under excavation. From the experiences of victims of moral injury, it is obvious that in addition to a psychological element, there is a spiritual element as well. Warren Kinghorn contends that though moral injury “is an important and useful clinical construct,” the phenomenon it attempts to name “beckons beyond the structural constraints of contemporary psychology.”²⁴³ The real cost of war on the fighters will continue to be hidden unless Moral Injury is also viewed from the spiritual perspective as a product of sin. Viewed from this angle, it becomes pertinent to note that religious and cultural therapies are not only possible, but should be encouraged as complementary to what mental health professionals

²⁴¹ Paul Gondreau, *Sex and the Human Good: A Thomist Account of Human Sexuality*, Chapter two, page 40 (Manuscript in preparation).

²⁴² ST I-II, q. 81, a. 1,

²⁴³ Chris J. Antal. Op. cit. 386

conventionally offer.

In decrying the failure to address the evils of the Vietnam War, William Mahedy, who served as a military chaplain in Vietnam remarked “I believe the essential failure of the chaplaincy in Vietnam was its inability to name the reality for what it was. We should have first called it sin, admitted we were in a morally ambiguous and religiously tenuous situation, and then gone on to deal with the harsh reality of the soldier’s life.”²⁴⁴ It is only a proper evaluation and diagnosis of the cost of war on the fighters that can bring about effective treatment of the various kinds of wounds they incur as a result of their participation in war. Some scholars today suggest that moral injury could amount to a euphemism for sin or at least a consequence of sin.²⁴⁵ Although there is great emphasis today on the safety of drone war, the sad reality is that no matter how safe war is, it is still riddled with the reality of sin, especially in cases where the lives of the innocent civilians are involved, even as unintended collateral damage.

Drone operators who advertently or inadvertently kill civilians cannot escape the guilt of sin no matter what technical terms used to excuse such actions. As the *Catechism of the Catholic Church* teaches, sin is present in all facets of human history and any attempt to ignore it or to give this dark reality other names would be futile.²⁴⁶ And once sin is brought into the picture, the need for healing and restoration becomes sacrosanct. Full restoration and repair of the damages caused by moral injuries cannot be attained without repentance and forgiveness, hence a consideration of a penitential element.

From ancient times, there has always been a recognition of the spiritual consequences of war. This was largely responsible for the various kinds of postwar rituals and penances that fighters were meant to pass through. We find these rituals and penances in various literatures, including the Old Testament. The Old Testament is replete with many war stories. In some of these stories, God even

²⁴⁴ Ibid.,388

²⁴⁵ Ibid., 388

²⁴⁶ CCC No. 386

commands that the lives of the enemies should not to be spared (I Samuel 15:3). Yet, in carrying out this command to destroy the enemies, God still places great emphasis on the value of the lives thus taken and the consequences of killing even an enemy. Hence, God instructs Moses that “anyone who has killed someone or touched someone who was killed must stay outside the camp seven days.” On the third and seventh day, individuals, along with all of their belongings and spoils, were required to undergo purification by water or by fire before they could re-enter the camp” (Num. 31:19-24). From the time of the Old Testament, human blood was considered to be sacred and the shedding of blood a source of contamination. Killing even an enemy brought some form of defilement that had to be cleansed before the warriors can be reintegrated into the community.

In ancient Greek culture, there was the practice of ritual cleansing that accompanied the shedding of human blood. Miasma was a form of ritual impurity consequent upon one's contact with a corpse or killing of a human being. Miasma was treated with Katharmos, which was a special kind of cleaning.²⁴⁷ Antiphon, a fifth century BC intellectual in his Third Tetralogy reveals that since god placed high value to human life when he created him, killing another human being unlawfully was a sin against the gods. Miasma therefore, was not a physical bloodstain on the killer's hands, but a form of supernatural wrath, “for the victim, robbed of the gifts bestowed by God upon him, naturally leaves behind him the angry spirits of vengeance.”²⁴⁸ This belief and practice is similar to the Zulu practice in Africa. The Zulu believed that a man who had killed in war was in fatal danger. To avert this danger, he would need to undergo purification. On returning from a battle in which a warrior had killed an enemy, he is to take off his ibeshu, which is a loin-covering, and put on that of the man he has killed, wearing it until purification is complete. He must also hold his assegai with the blade pointing downwards, and must seclude himself from the community until he undergoes a process of

²⁴⁷ Robert Parker, *Miasma: Pollution and Purification in early Greek Religion*, (Oxford: Clarendon Press, 1983),4

²⁴⁸ Antiphon, “Third Tetralogy”, 4:1:3, in K. J. Maidment, ed., Perseus Collection.

<http://www.perseus.tufts.edu/hopper/text?doc=urn:cts:greekLit:tlg0028.tlg004.perseus-eng1:1.3> (Accessed October 11th 2013)

purification, called Quanga.²⁴⁹

The Christian community of the first millennium generally assumed that warriors returning from battle were not only wounded physically but spiritually. They were encouraged therefore to undergo various rituals of purification, expiation and reconciliation. Depending on the kind of war they were engaged in, the number of killings they would have carried out and the intention behind the killing, religious authorities imposed commensurate penances on the returning soldiers.²⁵⁰ The penances could range from abstaining from the sacrament of Holy Communion for a number of years to other public acts of penitence.²⁵¹ A Penitential ascribed to Theodore of Tarsus (Archbishop of Canterbury, 668-90 AD) stipulates that “one who slays a man by command of his lord shall keep away from the church for forty days, and one who slays a man in public war shall do penance for forty days”.²⁵² In early medieval times, there were strict penances given to returning warriors. The warriors who had fought with William on the hill of Senlac had to pass through different kinds of penances depending on the nature of their participation in the battle:

Anyone who knows that he killed a man in the great battle must do penance for one year for each man that he killed. ... Anyone who wounded a man, and does not know whether he killed him or not, must do penance for forty days for each man he thus struck (if he can remember the number), either continuously or at intervals....²⁵³

While there could be other reasons why penances were imposed on returning soldiers, the penances themselves express the belief that in this epoch, killing in war does not only affect the victims who have been killed but also those who participated in the war. These penances speak to the conviction that there is a certain form of defilement that accompanies the taking of human lives and as such, that soldier requires purification. Returning warriors were not simply treated medically and psychologically, but also, spiritually. There were provisions for retreats, confessions and other

²⁴⁹ Eileen J. Krige, *The Social System of the Zulus*, (Pietermaritzburg: Shuter & Shooter: 1965), 276-77.

²⁵⁰ Verkamp, Bernard J. *The Moral Treatment of Returning Warriors in Early Medieval and Modern Times*. (Scranton: University of Scranton Press, 1993), xiii

²⁵¹ *Ibid.*,1

²⁵² *Ibid.*,2

²⁵³ *Ibid.*,6

penitential rituals, expressing the conviction that war causes some damages to the one engaged in it beyond visual estimations.

More recently, there have been accounts of different forms of pastoral care organized for war veterans in the United States, especially following the Vietnam War. However, unlike the imposition of penances for returning warriors in the Ancient and medieval ages, these liturgies, for returning veterans of the Vietnam war provided opportunity for reintegration with the community and reconciliation with God. Through these liturgies, the participants were afforded opportunity to experience the mercy and love of God. Timothy Sims shares his experiences about his participation in the “Kyrie” of a Lutheran Congregation which he remarked enabled him to experience God’s mercy and “helped him escape the gang of societal indifference” confronting the Vietnam veterans.”²⁵⁴ As noted by soldiers who return from war, reintegrating back to one’s community is always difficult.

Although the drone operator is not in the combat arena, from his drone station thousands of miles away he is still involved in a battle that sometimes causes the death of others, both guilty and innocent. Simply being present to the kind of destruction and violence that can be caused by Hellfire missiles fired from the sky is sufficient to cause grave moral harm to the drone operators. As noted earlier, many drone operators today experience moral injuries as a results of directly killing innocent civilians, watching of visual images of people who are killed, especially women and children and going against their deeply held moral or religious convictions which result in the deaths of others. With the level of virtual relationship that can sometimes develop after familiarizing oneself with the family of a drone target, there is no doubt that such moral injuries are possible. Clinical therapies often come short in providing solutions to experiences such as these.

This then becomes the moment for spiritual therapy. What the operator feels at this time is not simply a Post-Traumatic Stress Disorder. The experience of Col. T. Mark McCurley, a retired air

²⁵⁴ Ibid., 104-105

force pilot and former intelligence operator, provides support for this. Recounting his feelings after an operation he recalls:

The gravity of what I'd done overtook my emotions. My mind and body struggled to cope. I had just taken the one thing from two men that I could never return, no matter how hard I tried. I had ended their existence. Worse, I had removed one of God's creatures from this world. What greater sin could I have committed?²⁵⁵

In this remark it is evident that Col McCurely sees his action not as a mere wrong choice that brings about shame. Speaking from a Christian background, the Colonel points out that he had committed a sin against his creator. He also acknowledges that he had committed a sin against the one whom he had deprived of the one thing he cannot give back to him, his life, their lives. Again, when Brandon Bryan says, "I feel damned"²⁵⁶ as he remembers his different missions in which civilians had been killed, there is no doubt that this is not simply a question of shame. It is indeed a cry from the spirit realm. It is a yearning for spiritual healing. Many of the drone pilots come to a realization that they do some kind of harm to their souls by the very nature of the decisions they have to make sometimes. In an interview granted by Brandon Bryant, a former drone operator, he very aptly captured his experience of killing a child in these words: "I felt like I destroyed my soul."²⁵⁷ This is existential evidence that the body is not detached from the soul and that the experiences of the operators cannot be simply interpreted from the purview of mental dissonance. Col. John Read suggests that to effectively address the impact of moral injury, it has to be rightly seen as damage to the soul rather than viewed as an operational construct of war.²⁵⁸

When Brandon says he "felt like he destroyed his soul," he is not making reference to simple psychological depression or a moral apprehension. He is not simply talking about the guilt of conscience or shame about an unpleasant past. He is clearly pointing to a deeper level of injury.

²⁵⁵ McCurley, T. Mark, and Kevin Maurer. *Hunter Killer: Inside America's Unmanned Air War*. (New York : Dutton, an imprint of Penguin Random House LLC, 2015), 134

²⁵⁶ Joe Schoenmann op. cit.

²⁵⁷ Motherboard, <http://motherboard.vice.com/read/a-former-drone-pilots-guilt-kept-him-awake-at-night> (August 6, 2015)

²⁵⁸ Moral Injury: Unseen wounds: http://www.army.mil/article/139776/Moral_Injury__Unseen_wounds/ (accessed January, 20th, 2016)

Brandon would go on to say that he paid both a mental and spiritual price for his job as a drone operator.²⁵⁹ The spiritual price paid can obviously not be an object of scientific verification. There are many drone operators out there today who, like Brandon, could be in need of platforms not just to share their stories but to experience healing and support. Brandon's experience is evidence that even drone operators today are in need of the same opportunities given to returning soldiers in ancient and medieval times for healing and restoration.

Pastoral care for drone operators is highly essential. The very nature of the moral injury felt by drone operators is one that requires inner healing of the soul. For Catholics, the forgiveness that comes from the sacrament of confession could be a true remedy for the moral guilt that accompanies combat trauma. The *Catechism of the Catholic Church* teaches that "The confession (or disclosure) of sins, even from a simply human point of view, frees us and facilitates our reconciliation with others. Through such an admission man looks squarely at the sins he is guilty of, takes responsibility for them, and thereby opens himself again to God and to the communion of the Church in order to make a new future possible."²⁶⁰ Through the sacrament of reconciliation, the drone operator who is wounded not only physically but at times spiritually receives the gift of inner peace, serenity of conscience, strong spiritual consolation and "restoration of the dignity and blessing of the life of the children of God, of which the most is friendship with God."²⁶¹ It also facilitates restoration to the community of believers which can be fractured by the sins of the individual members. "In this sense it does not simply heal the one restored to ecclesial communion, but has also a revitalizing effect on the life of the Church which suffered from the sin of one of her members."²⁶² Confession expresses itself in genuine remorse and sadness for what has been done wrong. It offers the operator an opportunity for a very personal examination of conscience which in so many ways helped the

²⁵⁹ Amy Goodman and Juan Gonzalez, Brandon Bryant: Former Airforce drone (sensor) operator. Served the Navy for Five years. (Interview granted to: Democracy Now, National, daily, independent, news program(October 25, 2013).

²⁶⁰ CCC No1455

²⁶¹ Ibid., No 1468

²⁶² Ibid., No. 1469

medieval warriors come to terms with their involvement in war and the effects of their actions or inactions.

Examination of conscience within the context of confession goes beyond the mere telling of war stories. It also goes far beyond the kind of the self-criticism or full-conscious recall through which the therapists would have returning soldiers remember their past deeds so as to forget them within the context of unconscious motivation.²⁶³ Examination of conscience involves a more sincere and deeper examination of one's actions in the drone station under the lenses of objective moral norms like the just war theories, or the demands of virtue and the consequences of such actions on the victims, especially in cases where there are innocent victims. The operator "might also discover through the examination of his conscience that even though general moral norms have not been violated, he might have personally gone against his deeply held convictions or even sacred norms like being remotely part (being a remote cause) of the death of innocent civilians or maiming innocent noncombatants, or the destruction of an entire village. Examination of conscience does not necessarily mean that one is guilty of a crime. In some cases, examination of conscience could actually become a source of vindication.

An operator who may be worried about his actions during a particular mission may after such examination of conscience come to realize that none of his actions actually deserve the disapproval of his conscience. And, "feelings of guilt and shame are unwarranted by any "reasons" of either the mind or the heart."²⁶⁴ The role of the chaplain or priest at this point would be to guide the operator to let go of such feelings, offer and accept forgiveness. This brings about repentance which is manifested in the varying levels of positive changes which could include change of behavior, attitude and understating towards perceived enemies, and integration into the community and family. This could also manifest in the greater value for human life, more critical view about war and the quest to live more virtuous life.

²⁶³ Verkamp, Bernard J, op. cit. page 96

²⁶⁴ Ibid., 98

Outside the Catholic tradition, there are other religious assemblies and faith communities that have practices that are either penitential in scope and are aimed at restoring union with God and the community or are basic spiritual ritual that helps revitalize the faith of the victim of moral injury. U.S. Airforce Chief Master, Sergeant Harry Marsters acknowledges that involvement in his faith community which included church functions, homeless outreach and board activities helped him deal with his postwar difficulties.²⁶⁵ Because of the tendency to drift to a life of isolationism, which arises as a result of the feeling of not finding oneself worthy to mingle with one's faith community, the faith community of drone operators (in localities where they are known) have the great task of providing support, by helping them feel accepted, needed and loved and not judged and condemned. Drone operators who do not identify themselves as either spiritual or religious also need healing between the self, God and neighbors. They therefore, need communities where they can explore their moral struggles and address their Moral Injury too. Such spaces need to be created and more civilians need to be enlightened in understanding the intricacies of Moral Injury.

Most military camps have military chaplains. Chaplains have unique responsibility among fellow military personnel. In some cases, even those who are faced with various kinds of challenges, including, emotional, psychological, spiritual and social problems seek the chaplain rather than the other therapists provided. The reason for this is not farfetched:

Chaplains are viewed as "safe" listeners, because communication directed towards chaplains can be held confidential and does not have to report up the chain of command as those in other disciplines are required to do. Chaplains' styles of ministry also may make them more readily available. In addition to formal availability through worship services, funerals, hospital work, and counseling, chaplains frequently provide an informal "ministry of presence" by spending time at base camps in informal settings interacting with those they meet.²⁶⁶

More so, chaplains are trained in areas of theology, faith, morality, and often, in counseling in a way that clinical therapists are not. This makes it more appropriate for operators who face Moral Injuries to be referred to spiritual leaders. Apart from operators who specifically seek out spiritual leaders,

²⁶⁵ Winright, Tobias L., and Laurie Johnston. Op. cit., 171

²⁶⁶ Drescher, Kent, and David W Foy. "When they come home: posttraumatic stress, moral injury, and spiritual consequences for veterans." *Reflective Practice* 28, (2008): 85-102. ATLA Religion Database with ATLASerials, EBSCOhost (accessed March 15, 2016).

those others who report contrition, shame, guilt and other signs of moral wound should be encouraged to see the chaplains. Pastoral counselling remains a veritable tool for the healing of moral injuries. It would be the role of the chaplain to listen to the spiritual needs of the drone operators and offer spiritual guidance. Through series of prayerful counselling sessions, the chaplain is able to positively alleviate the pains of the drone operators. The Chaplain is also trained to recognize when the operator who is suffering moral injury needs professional (clinical) help.

Following the teaching of the Second Vatican Council, we must understand that these drone operators are our brothers and sisters, and their pains are real. Indeed “The joys and the hopes, the griefs and the anxieties of the men of this age, especially those who are poor or in any way afflicted, these are the joys and hopes, the griefs and anxieties of the followers of Christ.”²⁶⁷ The consequences of violating one’s conscience, even in situations where one’s actions are impossible to avoid or their effects are far away can be very traumatic. Drone operators who find themselves in these situations can be completely devastated. It is the duty of all, but more importantly, the duty of those placed in charge of recruiting them, to offer them basic information about the choices available to them when confronted with situations where they are required to act against their consciences or deeply-held personal or religious beliefs. To avoid moral injury, it is very important that drone operators should be educated about their own obligation to protect themselves against immoral orders. They should also grow in the knowledge of the cardinal virtues, especially in justice and prudence so that in those moments where they are required to make difficult decisions, they can more readily make the right ones, even if it entails a choice not to act. Available to the operators is the tool of conscientious objection.

The United States Conference of Catholic Bishops states very categorically that “It is immoral for a commander to issue or for a soldier to obey a command to intentionally kill

²⁶⁷ GSI No. 1

noncombatants in war”.²⁶⁸ Given the often grievous and terrifying consequences of Moral Injury, especially as a result of obedience to an immoral command, it is pertinent to note that drone operators who for moral or religious reasons feel very deeply that carrying out a particular command will inflict grave injury on them are entitled to object to such commands. Conscientious objection to military service is recognized by international laws and is based on the right to freedom of thought, conscience and religion which are outlined in the Universal Declaration of Human Rights and the International Conference on Civil and Political Rights. Article 18 of the Universal Declaration of Human Rights states that “Everyone shall have the right to freedom of thought, conscience and religion. This right shall include freedom to have or to adopt a religion or belief of his choice, and freedom, either individually or in community with others and in public or private, to manifest his religion or belief in worship, observance, practice and teaching.” Even though these two articles do not specifically refer to conscientious objection, the U.N. Human Rights Committee further explains: “the conference does not explicitly refer to conscious objection, but the committee believes that such a right can be derived from Article 18, in as much as the obligation to use lethal force may seriously conflict with the freedom of conscience and the right to manifest one’s religion or belief...”²⁶⁹ It is in line with this provision that Veterans of the U.S. wars in Vietnam, Iraq and Afghanistan gathered in protest in Nevada, outside Creech air force Base, sometime in March 2015, to encourage drone operators to take the route of conscientious objections instead of carrying out attacks in the named countries above. The Veterans caution the operators that:

It is not normal or healthy for human beings to kill other human beings. Many veterans continue to suffer from PTSD and “moral injury” for the rest of their lives. The suicide rate for active duty GI’s and veterans are extremely high... We encourage you to think carefully about your place in the scheme of things. Can you, in good conscience, continue to participate in killing other human beings, no matter how remotely? If, after serious soul-searching, you come to believe you are against all wars, you can

²⁶⁸ A Reflection of the National Conference of Catholic Bishops on the Tenth Anniversary of The Challenge of Peace November 17, 1993, <http://www.usccb.org/beliefs-and-teachings/what-we-believe/catholic-social-teaching/the-harvest-of-justice-is-sown-in-peace.cfm>

²⁶⁹ Alice Lynd with the assistance of Staughton Lynd: moral injury and conscientious objection: saying no to military service by Vietnam full disclosure, published on: august 5, 2015, <http://vietnamfulldisclosure.org/index.php/saying-no-to-military-service-on-moral-injury-and-conscientious-objection-by-alice-lynd-with-the-assistance-of-staughton-lynd/> (accessed January 17th, 2016), 48

apply for a discharge from the Air Force as a Conscientious Objector. If you need advice, there are conscientious objector organizations that can help you.²⁷⁰

In the midst of the demands of obedience to higher authority, the drone operator, regardless, acts in freedom and is responsible for his actions. The drone operator remains a moral agent even in the face of coercions from the ground commander who gives the last order that an identified target should be killed. Drone operators make significant decisions about life inasmuch as they have the finality of action. They are the *terminus ad quem* to a whole process of identification, targeting and killing of targets. To argue that drone operators cannot be generally held liable for innocent deaths simply because they are carrying out orders from their commanders could be compared to arguing that those who gassed over six million Jews in Nazi German's concentration camps such as Auschwitz are not responsible for the heinous crimes against the victims of the gas chambers since they were simply carrying out Hitler's orders. Or that those who had participated in the odious crime of the transatlantic slave trade in the eighteenth century and who had subjected the slaves to all forms of torture in the plantations were innocent since they were carrying out the orders of their Lords or plantation owners

The drone operator cannot be detached from his actions and the consequences of such actions. While drones give a sense of safety in war, given that those who use drone technology record zero physical injuries, the operators are not free from Moral Injury, which can also be very destructive. The State may win a war through the use of drones, but the individual operators suffer varying degrees of losses.

²⁷⁰ Message from Veterans to Drone Operators and Support Personnel at Creech Air Force Base, Veterans for Peace, March 04, 2015, <http://www.veteransforpeace.org/pressroom/news/2015/03/04/message-us-veterans-drone-operators-and-support-personnel-cr> (Accessed January 17th, 2016)

CONCLUSION

There is no doubt that the introduction of remotely piloted aircrafts to the battlefield has had an overwhelming impact on the way wars are chosen and fought. This has also significantly changed, at the very fundamental level, those who are engaged in the fighting, thus transforming the very agent of war. Interestingly, combat drones have become a mix of an enigma wrapped in puzzle. They offer physical safety to the ones who use them, yet expose them to varying forms of moral danger. They remove the operator from the battlefield, yet, immerse him overwhelmingly into the very life of the target, making the operator both an agent and a victim. The effects of drones on the operators remain a great source of concern that should be given the utmost attention both by the governments who authorize their use as well as the users themselves.

The training of drone operators is as important if not more so, than the innovation of military technology that the drones themselves constitute. As technology continues to evolve, those who operate them would have to be trained to better harness the inherent value in them within a moral context, maximizing the benefits and minimizing the damages. The task of drone operators in combat operation, especially for the fact that they, as it were, are given charge over people's lives, should require rigorous formation not just in military science but in the ethics of war. Speaking to the *Washington Post*, a fighter pilot compares the training of drone pilot to "creating the equivalent of a puppy mill."²⁷¹ To hand over a Hellfire missile to a young energetic man just after few months of a crash program could pose a grave risk.

Even though targeting involves other team of people, the position of the drone operator is very central in the overall execution of a particular mission. Combat drone operation goes far beyond the mere ability to maneuver a device attached to one's computer system. Whether as sensor operator or as pilot, drone operation is a complex process of deliberation, analyses, communication and execution. All these operations are carried out in the context of military combat. Therefore, drone

²⁷¹ Benjamin, Medea op. cit., 89

operation in this sense as a military/combat activity is one that requires adequate knowledge not just of the necessary techniques for operating the system, but about the whole question of the operations of war, the ethics of war and possible consequences or virtual conflict, if they are to be able to fully exercise judgement and conscientious objection.

Experience shows that drone operation is not as exciting as it is generally assumed to be. Those who aspire to the drone program must be made aware that drone operation is not simply like playing a video game. Unlike the playing of video games that is full of action and intended for entertainment, drone operations most of the times are not action-packed. For much of their time, drone operators would only be involved in what the Air Force calls ISR: Intelligence, Surveillance, and Reconnaissance.²⁷² This would usually amount to following a target, tracking a target, and gathering information about the target. The actual firing of missiles at targets may last for a few minutes after a week or even a month-long ‘stalking of the targets’. A potential drone operator who thinks drone operations means spending every day of the week firing Hellfire missiles on targets may be disappointed just within his first week on the job.

Bearing in mind the possibility of various kinds combat stress, some levels of PTSD and moral injury, drone operators should be adequately informed about such possibilities and also prepared on how to handle the outcome of their operations. While some operators are affected by the constant streams of images they see during missions, others are affected by mistakes made that affected the lives of innocent civilians. Many drone operators today have evidently experienced these challenges. Although not all operators encounter these challenges, it is a fact that some do.

The onus lies on the drone operator also to prepare himself adequately for his mission. Ignorance of the rules of engagement could lead to the killing of innocent civilians. Ignorance of the possible effects of drone operations could lead to outcomes for which the drone operator is unprepared to manage. And since some of the trauma-related challenges arise as a result of wrong

²⁷² Corey, Mead, The Atlantic: A Rare Look Inside the Air Force’s Drone Training Classroom, JUNE 4, 2014 <http://www.theatlantic.com/technology/archive/2014/06/a-rare-look-inside-the-air-forces-drone-training-classroom/372094/>

choices which lead to the deaths of civilians, it is sacrosanct that operators make the right choices when required to carry out an operation. When a target has been identified, the drone operator must consider from the multitude of options how to hit the target without causing damage to innocent lives. Even when there is the right intention to kill a terrorist who is about to cause harm, this intention must be matched by the right actions. The drone operator must at all time have the capacity to make good judgement and the cardinal virtues are a *sine qua non* for this.

Although there is the tendency to argue that drone operators are merely carrying out orders given to them by ground commanders, and as such should not be responsible for their actions, the reality is that they never cease to be free agents. Even if the drone operator were coerced into carrying out an action by a ground commander, that would not remove voluntariness. The fact that there is an external influence does not make an action less free. The drone operators as moral agents remain responsible for what they do or do not do in as much as they have the freedom to obey or disobey a particular order. Whatever action carried out has its consequences for the ultimate moral good of the operator. In each action, and in some actions more than others, the operator either fails to choose the good, or chooses the good. And through each action, some more than others, he becomes virtuous, morally self-respecting and resilient or does not. In all these interplay of choices as manifested in the operator's actions, there is indeed a fundamental consequence on who he is and who he becomes.²⁷³ Every single action taken by the drone operator counts towards shaping his character.

Despite the destructive capability of drones, they remain instruments in the hands of humans. Although they are gradually being equipped with autonomous intelligence, they are still very much controlled by humans. This places the responsibility not on the weapon but on the one who controls the weapons. "No matter how precise the weaponry or how close the trigger to its effects, if the one pulling the trigger is not a person of character formed in the virtues that characterize a just war

²⁷³ DiNoia, J. A., and Romanus Cessario. 1999. *Veritatis splendor and the renewal of moral theology*. (Princeton, NJ: Scepter Publishers), 8-9

people, then that technology will only amplify vice”.²⁷⁴ Because drones are capable of such massive destruction, the one who controls them must be one with clear understanding of the ethics essential to practical wisdom, such as: value of life, the laws governing the use of certain weapons; and must also have the mental capability to make decisions that affect others in the operation of the weapons. With the growing availability of drones in various countries today and fewer obstacles in using them, any deficit in the character of those who use them will be disastrous to the human family. However, with the innovative advantages of drones in the areas of precision, maneuverability, discrimination and ability to stay in the air for long, having the right operators could even make drone warfare more just.

A virtuous operator, as much as the rest of the people responsible in the process, could make a great difference in drone warfare. In “Eye in the Sky”, the Colonel, played by Helen Mirren who had requested for GBU-12's which is a 500pounds explosive with a causality radius of 200-300 feet and a 50% kill ratio was unhappy to discover that the drone had been equipped with two hellfire missiles with a kill radius of roughly 50feet, and a wounding radius of 65 feet instead. Even though one of the airmen whom she questioned about this decision had explained that the reason for this initiative was to have a lighter load which would allow for longer loitering time, there is no doubt that this decision saved the lives of many civilians within the vicinity of the airstrike.²⁷⁵ If they had used the GBU-12's, it would have caused greater impact, possibly destroying every single home surrounding the target and obviously, more civilian casualties. Hence, decisions such as the kind of weapon to be used even in legitimate strikes are still very much important. A virtuous commander or even a virtuous airman can choose a weapon that would minimize civilian causality considerably.

The drone operator must be, first, a good human being before he can become a good drone operator. He must be a person who habitually and freely chooses to do what is good and virtuous at

²⁷⁴ Daniel M. Bell: Drones, it is morally wrong to kill by remote control?, Offshore Word Press, Jr<https://fromoffshore.wordpress.com/2011/08/18/drones-part-2/> (Accessed March 15th, 2016)

²⁷⁵ Cian Westmoreland, The Huffington Post, Whistleblower's Review of "Eye in the Sky", 04/20/2016) accessed August 20th, 2016. http://www.huffingtonpost.com/cian-westmoreland/whistleblowers-review-of_b_9737034.html

all times. A bad tree, Jesus says, cannot produce good fruits in the same way that a good tree cannot produce bad fruits (Matthew 7:18). While the use of drones may not be intrinsically evil, since drones can be used for very good purposes such as surveillance which protects the people, and even eliminating those who actively cause grave evils in society as terrorists do, if the operators are not people of character, there is bound to be grave consequences. Drones cannot be smarter and more responsible than those who use them. No matter how smart, better and precise drones are, if those who use them are not smart, responsible, and people of virtue, the whole development in drone technology may only become futile. No matter how safe and technologically advanced a car is, having a drunk driver in the driver seat definitely portends danger. In the final analysis then, the man behind the computer screen thousands of miles away is very important. They have the capacity to make it more discriminatory or be very careless with its use making it more deadly. They can become more careful in the choice of weapons to be used for different targets, where to use them and when to use them to avoid indiscriminate killing of noncombatants. They have to courageously stand for justice at all times even in dealing with the enemy. They must be temperate in their actions and prudent in their decisions. And we must exercise due diligence in developing and caring for, not just the machinery of war, but also those who operate the machinery, especially when they are insulated from traditional battlefield.

We cannot simply wave off the reality of moral injury for drone operators. No matter how the society tells them to feel heroic about their actions, some never do. Many drone operators go home with the hidden wounds of their actions or inactions. Drones may be able to locate and decimate the strongholds of Boko Haram in North-Eastern Nigeria, but not until it has also inflicted invisible wounds on those who operate them. In the end, it is imperative that technology be always placed at the service of humanity, guided constantly by moral virtues, so as to not become the Lord and master of humanity but only its servant. It must be remembered that drones like every other technological entity created by man all through history can be a good servant but a terrible master.

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