

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188		
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.						
1. REPORT DATE (DD-MM-YYYY) 25-04-2022		2. REPORT TYPE FINAL		3. DATES COVERED (From - To): N/A		
4. TITLE AND SUBTITLE <i>Drones as an emerging technology in the south African military: Challenges for African values</i>				5a. CONTRACT NUMBER: N/A		
				5b. GRANT NUMBER: N/A		
				5c. PROGRAM ELEMENT NUMBER: N/A		
6. AUTHOR(S) Kula Ishmael Theletsane, South African Navy				5d. PROJECT NUMBER: N/A		
				5e. TASK NUMBER: N/A		
				5f. WORK UNIT NUMBER: N/A		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Ethics and Emerging Military Technology Graduate Certificate Program Naval War College				8. PERFORMING ORGANIZATION REPORT NUMBER: N/A		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES): N/A				10. SPONSOR/MONITOR'S ACRONYM(S): N/A		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S): N/A		
12. DISTRIBUTION / AVAILABILITY STATEMENT Distribution Statement A: Approved for public release; Distribution is unlimited.						
13. SUPPLEMENTARY NOTES A paper submitted in partial satisfaction of the NWC Ethics and Emerging Military Technology Graduate Certificate Program. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.						
14. ABSTRACT The South African National Defence Force is investing in technology and drones are becoming popular. There is no policy on how drones are to be used and integrated into the military. Drones in South Africa could impact the essence of the African value of Ubuntu. It took South Africa many years to get out of the apartheid system where the military was used to promote the apartheid agenda and the civil-military relations were non-existence. The military is starting to win the trust of the community. The introduction of technology could jeopardize this trust and compromise the African values. The military members are recruited from the society practising these values and one cannot afford to see these values diminishing with technology. Using drones in warfare is morally controversial since it fails to pass the test of any justified use of military force. Often drone operators or the fighting force do not need any courage to fight. There is little sacrifice required to be made for the cause fighting for; drones are costless to own force's risk and they rendered war easy and inhumane. Soldiers see less suffering and the community see fewer injuries and deaths. As a result, it becomes easy to wage war as there is less suffering to own force						
15. SUBJECT TERMS (Key words) Ethics, Ubuntu, egalitarianism, utilitarianism, duty ethics, artificial intelligence, drones, consequentialism, survival, solidarity, compassion, respect, and dignity						
16. SECURITY CLASSIFICATION OF:				17. LIMITATION OF ABSTRACT N/A	18. NUMBER OF PAGES 41	19a. NAME OF RESPONSIBLE PERSON Thomas E. Creely, Ph.D.
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED	19b. TELEPHONE NUMBER (include area code) 401-841-7542			

TABLE OF CONTENTS

ABSTRACT.....	1
INTRODUCTION AND BACKGROUND	2
THE THEORETICAL FRAMEWORK: JUST WAR THEORY	4
THE MORALITY OF DRONES.....	10
ETHICAL APPROACHES	15
The Rights approach	15
Virtue Ethics	17
Deontological Ethics	19
Utilitarianism	20
<i>UBUNTU</i> APPROACH TO ETHICS	21
Survival	23
Solidarity	24
Compassion	25
Respect and dignity	25
DRONES IN THE SOUTH AFRICAN MILITARY: AN ETHICAL CHALLENGE	26
THE ETHICAL APPROACH OF <i>UBUNTU</i>	32
COUNTERARGUMENT	32
CONCLUSION.....	33
BIBLIOGRAPHY	35

ABSTRACT

Although the use of technology will bring efficiency to the South African military, it will likely undermine the core African values and ethics of *Ubuntu*. This paper discusses drones as an emerging technology in the South African military and how they will impact the African value of *Ubuntu*. The South African National Defence Force is investing in technology and drones are becoming more popular. There is no policy in the South African Military on how drones are to be used and integrated into South Africa. The use of drones in South Africa could impact the essence of the African value of *Ubuntu*. It took South Africa many years to get out of the apartheid system where the military was used as an instrument of national power to promote the apartheid agenda and the civil-military relations were non-existence. The military is starting to win the trust of the community. The introduction of technology could jeopardize this trust and compromise African values. The military members are recruited from the society practising these values and one cannot afford to see these values diminishing with technology. Knowing South Africa, in the absence of any threat or enemy, it is highly likely that these drones will be used on the South African people in times of riots, and this could take the country backwards.

Although drones have brought much relief to the military, their use in warfare is morally controversial since it sometimes fails to pass the test of any justified use of military force. Often drone operators or the fighting force do not need any courage to fight. There is no sacrifice required to be made for the cause fighting for; drones are costless to own force's risk and they rendered war easy and inhumane. Soldiers see less suffering and the community see fewer injuries and deaths. As a result, it becomes easy to wage war as there is less suffering to own force. Firing a missile from a drone is more like a computer game. With the use of drones, the military is losing its morals and virtues.

It appears that the military is no longer caring and courage as a virtue for the military is diminishing. There are several benefits of drones in the military that could disrupt a full war. The distance between the pilot and the target provides a safety net to the pilot but brings a different perspective. While others argued that the personalization of distance makes it easy to kill the enemy, it could equally be argued that the distance provides safety for the troops on the ground.

INTRODUCTION AND BACKGROUND

The world has witnessed the role of technology in the building and destruction of civilization and its effect on global peace. Technology divided the rich, the poor and nations. It has improved lives in many ways and at the same time destroyed the moral fibre of many societies. Technology has also changed the nature of war. For years, the military has entered a digital phase of artificial intelligence, smartphones, social media, big data, robotics, and the internet of things to mention but a few. The world's efforts to keep tabs on technology through policies and regulations and the ethical code of conduct of information technology professionals are no longer enough for a responsible digital future. Other attempts such as shaping technologies are most of the time too late and slow and cannot keep up with the ever-changing technological development. Legal professionals cannot catch up with the latest data analysis, the internet, and cloud technology. As a result, countries find themselves trying to regulate tomorrow's technology with legal prescripts of yesterday.

South Africa is a classic example of a country using yesterday's regulations for tomorrow's technology. Technology develops so fast, and countries are unable to keep up with this development. It could be argued that, despite the title of this paper, technology is no longer emerging in the military today, especially drones. Many countries have been using unmanned vehicles in their militaries for decades. However, in the South African military context,

technology is emerging as the use of drones is starting to gain momentum. The South African military only started investing in drones less than three years ago. They are not yet used for combat but only for patrolling the borders. Artificial Intelligence (AI) is making its way into the South African military. It is therefore vital to look at how this AI will impact the human space in the military and society.

The AI in the SA military can make the use of force more likely while reducing the risk to soldiers. The AI does not only change how a soldier fights but also who a soldier is, which has wide implications for military recruitment and the relationship between the military and the society it defends. This is important in South Africa with a bad history of civil-military relations where the military was used as an instrument of power to further the apartheid agenda and suppress the ideologies of the freedom fighters. To date, although the country is starting to understand the actual role of the military in a democratic society, South African society still has little trust in the military. The apartheid wounds caused by the military are not yet healed.

Research shows that artificial intelligence and the use of technology such as drones can be very disruptive. Their disruptiveness is derived from their attributes and how they interact with a specific community of users. This interaction can raise ethical and moral concerns through its impact on justice, well-being, human autonomy, and social disruption. Artificial intelligence became very important in the last few years. It has developed to become an academic discipline attracting several students in universities, following various fields from psychology and engineering, computer science and management. The literature on AI and technology is in abundance, but there is little on their impact on the African values and ethics of *Ubuntu*, and hence the need for this paper. This pass seeks answers to the following questions: What are the challenges of emerging technology in the South African National

Defence Force on African values and ethics? Which African values are likely to be impacted by the emerging technology?

To answer these questions, the paper used qualitative methodology and reflects elements of description. The concept of emerging technology and its relationship to ethics and African values is explored. Relating to the research methods, a literature study of appropriate primary and secondary sources containing authoritative publications, books, journals, the internet, and official documents was conducted to gather information. At the end of the study, the researcher reflects on the potential challenges of emerging technology in the South African National Defence Force on African values of *Ubuntu* and ethics.

THE THEORETICAL FRAMEWORK: JUST WAR THEORY

The history of Just War Theory starts with Augustine. While Augustine was not the first to address the morality of war, the work of Augustine's spiritual mentor, St Ambrose, and Cicero and Aristotle include such debate. This section starts with Augustine since he is regarded as the most prominent of the early just war theorists. When Augustine started his writings about war, many Christians were practising pacifism: in the garden of Gethsemane, Jesus rebuked Peter for defending him from arrest; “for all who take the sword will perish by the sword.”¹ Robert Holmes, talking about early Christian pacifism, states that it is problematic to read the Bible, especially the New Testament, with the emphasis on loving one’s enemy and giving the other cheek without suspecting that Jesus was against the war.² Augustine, however, purports that if Christianity was compatible with the political necessity of governance and therefore implemented by governments and their political leaders, it would have to accept war as a practical and moral reality. There is an abundance of scholarship on

1 The Holy Bible, New Revised Standard Version Catholic Edition, Matthew 26:52.

2 Robert L. Holmes, *War and Morality* (New Jersey: Princeton University Press, 1989), 116.

the Just War Theory. With the use of drones and for the purpose of this paper, it is perhaps time to re-visit the concept of the Just War Theory.

The history and the use of drones are widely documented. However, not many sources documented a timeline of a drone strike, and few details are available of the earlier strikes as many of these strikes are classified. Governments keep these documents classified to avoid a civil claim. Several authors have considered the challenge posed by drones on the traditional Just War principles. Various authors agree that drones forced us to adopt a new perspective. A conflicting issue among most writers is whether the drone operators are combatants, and there appears to be no consensus. However, a logical conclusion can be drawn. If the drone operator is using it to fight a war or contribute to the fight, then the operator becomes a combatant and must be treated as such.

The Just War theory validates the morality of war. It is mainly a Western philosophical traditional lens.³ This theory aims to answer two questions of justice: is the decision of going to war moral and based on a just cause? Are the actions in wartime moral?⁴ The first question is called *Jus ad Bellum* and the second one is *Jus in Bello*. The third category is called *Jus Post Bellum* which refers to justice after the conflict. For this paper, only the first two will be discussed.

Whether the decision to go to war is morally good or permissible concerns *Jus ad Bellum*. For this reason, it has normally been regarded as the domain of political leaders.⁵ The central foundations of the traditional Just War theory hold that fighting is a rule-governed activity

3 Nääf, Amanda. "Droning toward a Shift in the Morality of War? A Just War Approach to the United States Use of Drones in the War on Terror" (PhD diss., Lund University, 2011).

4 Leahy, Mary-Kate. "Keeping Up with the Drones: Is Just War Theory Obsolete?" U.S. Army War College Carlisle Barracks (2010): 7.

5 Jeff McMahan, *Killing in War*, (Oxford: Clarendon Press, 2009), 35.

and that the rule applies equally to soldiers fighting on either side of the conflict.⁶ One of the principles of the Just War Theory is that aggression can be resisted. *Jus ad Bellum* is based on this foundation: it is justified for a state to defend itself against any aggression. For a war to be acceptable, it must justify several conditions. Adherence to all conditions is important for a war to be deemed just; failure to satisfy one is reason enough to declare war as unjust. According to Nicholas Fotion, justifications act as barriers to be overcome before a nation can confidently say it has justice on its side to enter the war.⁷ The six criteria must be met before considering any war to satisfy the principles of *Jus ad Bellum*.⁸

- a. Just cause. This is about granting *prima facie* approval for a political group to wage war in response to a particular wrong and it must only be in response to those wrongs. In the contemporary climate, responding to aggression, a term with both moral and legal definitions generally describes the violation of the rights of one country by another. This is the most universally accepted standard of just cause.⁹ There must be just and appropriate reasons for waging war such as protecting the innocent, self-defence, rebuilding human rights and assisting friends in their self-defence. Responding to aggression is surely just cause but it cannot be the only just cause.¹⁰ Just cause is described by reasons amounting to justification by the nation waging war. The just cause condition underlines that the devastations of war can only be justified by the commission's very severe wrongs.

6 James, M., Dubik, *Just War reconsidered: strategy, ethics and theory*, (Kentucky: University of Kentucky Press, 2016), 9.

7 Fotion, Nicholas, *War and Ethics: a new just war theory*, (London: Continuum, 2007), 86.

8 Bell, D.M. *Just war as Christian discipleship: Recentering the tradition in the church rather than the state*, (Grand Rapids, MI: Brazos Press, 2009), 21.

9 Fotion, Nicholas, *War and Ethics*, 86.

10 Charles Guthrie and Michael Quinla, *The Just War Tradition: Ethics in Modern Warfare*, (New York: Walker & Company, 2007), 17.

- b. Right intention. The criterion of the right intention speaks directly to the state of mind of the country making the decision. One of the 13th century just war theorists, St. Thomas Aquinas argued that war is just if it is fought with the right intentions,¹¹ Or “to create a much better, more just, subsequent peace than there would have been if we had not gone to war.”¹² There are various reasons for this: One, because wars waged with wrong intentions, even though they are born to produce good results, are morally bad and as a result must be avoided. Two, wars that are waged with evil intentions make evil actions such as torture and attack on civilians more likely.¹³ The intentions required by political leaders when waging war, as Michael Quinlan puts it, are that “The notion of waging war must be in line with ethics and Christian values.”¹⁴ Countries can go to war to correct a wrong or bring peace for national pride or revenge against the enemy.
- c. Proportionate cause. Proportionality is a condition for both *Jus in Bello* and *Jus ad Bellum*. As an *ad Bellum* condition, it relates to ensuring that the international community is left in a better condition after the war than it would have been without war.¹⁵ This requires political leaders not only to consider how war will affect their countries but also to consider the interests of the international community. There must be a thorough cost-benefit analysis to make sure that the good to wage war outweighs the suffering caused by war. In other words, war must prevent suffering rather than cause more of it. Justification of other conditions is necessary to go to war.
- d. Reasonable chance of success. Reasonable chances of success are an extension of the proportionality criterion. If there is not enough probability of success, it is highly

11 Thomas Aquinas, Fathers of the English Dominican Province, *Summa Theologica*, 1920.

12 Michael Quinlan, “Justifying War”, *Australian Journal of International Affairs*, 58, (2004): 8.

13 Darrell Cole, “War and Intention”, *Journal of Military Ethics*, 10, (2011): 174.

14 Michael Quinlan, “Justifying War”, *Australian Journal of International Affairs*, 9.

15 Fotion, Nicholas, “War and Ethics”, 87.

unlikely that the war will be proportionate.¹⁶ Countries will lose civilians' and soldiers' lives in the pursuit of an impossible cause. For war to be justified, there must be a possibility of victory. However, this raised a question, what is victory? What does it mean to win the war? Does victory imply military success? Or is victory defined in terms of the proportionate benefits to the international community? Walzer purports that conceding to aggression may seem like the lesser evil in the short term but in the long-term appeasement would be, quite simply, a failure to resist evil in the world.¹⁷ War always brings pain and suffering. This cost is worthwhile only if it outweighs the destruction and death of acquiescence. If the reasonable chance of success is less there is no reason for using warfare. To answer the above questions requires a rational sense of what constitutes victory, which requires the objective of war to be clearly articulated. The criterion for reasonable chances of success serves as a sensible test for pursuing morally good achievable goals.

- e. Last resort. The last resort is perhaps misleading. It does not mean that every possible option must be exhausted before declaring war. According to Orend, the last resort is to profoundly influence political leaders' conduct, which must be taken to imply "least to be preferred."¹⁸ The last resort is closely linked to the right intention and it does not require political leaders to tick it off as a checklist before justifying war. Instead, all possible nonmilitary options must be considered if they present some probability of success. War should be the last resort when all other reasonable efforts have failed. Any peaceful resolution like diplomacy or political pressure must first be exhausted before considering war. This is, however, a debatable and contentious

16 Fotion, "Nicholas, War and Ethics", 87.

17 Walzer, Michael, "World War II: Why Was This War Different?", *Philosophy & Public Affairs*, 1 (1971): 4.

18 Guthrie, Charles and Quinlan, Michael, *Just War, The Just War Tradition: Ethics in Modern Warfare*, (New York: Walker & Company, 2007), 114.

matter; after all, a revolution that topples an unjust government through civil war may be justified.

- f. Right authority. Only the legitimate governing authority can authorize war. In other words, for war to be just, it must be declared by a body with moral and legal authority to do so.¹⁹ Normally, the right to declare war is restricted to the political leaders of governments, hence only states can engage in just wars.

Apart from the *Jus ad Bellum*, the traditional just war theory also contains the *Jus in Bello* principles of due care and due risk, which hold that soldiers must take reasonable steps to protect civilians. According to David Luban, this trade-off of risk is even more pronounced when the fighting is between a force with superior technology and non-state adversaries fighting among civilians.²⁰ In the Old Testament, we read about Moses waging war with the Egyptians because of obedience to God's command. However, there was no justification for Moses to wage that war and Augustine noted that Moses took no pleasure in the war. According to Augustine, if he acted out of barbarity, he would have displayed the love of violence or revenge, not God.²¹ The moral law dictates that Moses only fight for moral retribution. Similarly, the motivation of the soldiers must show only adherence to God's law. What matters to Augustine was only the matter of the soul. This is the reason Augustine claimed that the evil of war is in the vices. A classic example is a war in Ukraine where Russian troops shoot indiscriminately killing innocent civilians and destroying their property. It is important to note that meeting the proportionality requirement as a condition of *Jus ad Bellum* does not render just war theory an instantiation of consequentialism.²² This is because one cannot use proportionality to justify war as it is insufficient.

19 Guthrie, Charles, and Quinlan, Michael, *Just War*, 114

20 Luban, David, *Risk taking and force protection*. (New York: Routledge, 2014), 277.

21 Robert L. Holmes, *War and Morality*, (New Jersey: Princeton University Press, 1989), 120.

22 Fotion, "Nicholas, War and Ethics", 87.

Luban realized that the traditional principles of *Jus in Bello* do not provide a direct answer to how much risk, how much care, or how to balance the two. In Walzer's *Just and Unjust Wars*, he admits that the laws of war state nothing about the degree of care to be provided to civilians and the amount of risk to the soldiers.²³ Protecting soldiers is always a priority of every commander but it does not outweigh the moral requirement for soldiers to provide the minimum standard of care even to the enemy and civilians.²⁴ This has become even more complicated as countries are investing more in technological warfare. As countries continue to use technology such as drones in order to expose their soldiers less to risk, the civilian population becomes even more vulnerable. Drones also reduce the military and political costs compared to troops' intensive strategy by permitting a military effort of smaller magnitude and greater duration in a relatively permissive environment.²⁵ As a result, governments can use funding intended for war on other social requirements. This brings out the debate about the morality of drones in warfare and the military.

THE MORALITY OF DRONES

The morality of drones is a very complex concept. There are different arguments about the morality and immorality of drones. There are benefits of drones to many militaries and equally so they pose a moral challenge. There are several cases where drones fail the ethical test. The use of drones fails to satisfy many conditions of the justified use of military force. The drone operators require no courage as one of the virtues in the military. There is no willingness to sacrifice for the cause as they are costless in terms of risk to one's own force.

23 Walzer, Michael. *Just and Unjust Wars: A Moral Argument with Historical Illustrations*, (New York: Basic Books, 2015). 216.

24 Luban, David, Risk taking and force protection, 285

25 Timothy P, Schutz, "Remote warfare: A new architecture of Air Power". In: *Airpower in the age of Primacy*. Ed., Phil M, Haun, Colin F. Jackson & Tomothy P. Schultz (Cambridge: Cambridge University Press, 2022), 46.

Using drones loses one of the traditional military virtues such as respect for the wounded or enemy and personal humility.²⁶ With drones, soldiers have no direct interaction with the enemy and have less feeling of what war is all about. It is all about pushing a button and going home as if nothing happens. Launching a missile from a drone is more like firing from a computer game.²⁷ Although drone operators are expected to make ethical decisions that comport with the laws of war and *Jus in Bello*, using drones in battle, may require no or less humility, virtues, or a sense of oneself. Some operators of these drones perceive their work as any other job. They leave their homes to work normally, drop off their children at school on their way and spend their days flying drones. They are rewarded for hitting targets. Drones remove soldiers from the battlefield and make war inhumane. Some could argue that this makes war human by enabling greater precision and less collateral damage. This is true only if it is looked at from the lens of own force, but the enemy and the innocent civilians suffer the most.

In one of the British Broadcasting Corporation interviews, the dissenting former United States drone operator Brandon Bryant outlined how they conducted drone strikes in the Middle East from over 10,000 kilometres away in Las Vegas.²⁸ He described how they killed innocent civilians. According to Bryant, there was no investigation after killing innocent civilians. The investigation only takes place when there was a crash or loss of a drone. We, therefore, value material more than human life. Brandon Bryant's claim could be disputed as it may not be a true representation of the United States drone operators. Furthermore, Bryant is one individual among the many United States military personnel and his views could be subjective. Drone warfare sometimes undermines military morality. Drone operators often

26 Aleksandar Fatic, The Ethics of Drone Warfare FILOZOFIJA I DRUŠTVO XXVIII (2), 2017, 362.

27 Aleksandar Fatic, The Ethics of Drone Warfare, 362.

28 Jethro Mullen, CNN Report: Former drone operator shares his inner torment, accessed March 18, 2021, <https://www.cnn.com/2013/10/23/us/drone-operator-interview/index.html>

leave civilians torn into pieces by just clicking a computer mouse. They engage in war with no real sense of moral responsibility. During the conflict, the enemy is given a chance to lay weapons down and every effort is made to make a distinction between combatants and non-combatants.²⁹ But, this is not the case with drones, by the push of a button collateral damage is inflicted on the enemy and innocent civilians. This is done to expose soldiers less to danger. On the contrary, drone operators have an immense amount and sense of moral responsibility. Also, the high-tech sensors on drones help discriminate between combatants and non-combatants, particularly when coupled with precision munitions. For drone operators to disregard the civilians will be reckless and careless.

In many democratic countries, men and women join the military voluntarily with full knowledge that they are putting their lives in danger in the name of duty. When engaging in battle, members of the military may die as part of their job and that is what they signed for. Legally, it is justifiable to kill enemy combatants and unjustifiable to deliberately kill civilians.³⁰ Civilians' rights are different from that of a soldier during wartime. The civilians' lives are protected during warfare and the soldiers' lives are taken during the war.³¹ Therefore the soldiers' right to life is less than that of a civilian. Hence, any means to deploy technological weapons to protect the lives of soldiers while endangering the lives of civilians is inconsistent with the moral logic of the law of war. Deploying drones to shield soldiers from harm while allowing them to kill enemies and civilians is against the moral logic of law.³² In war military personnel must risk their lives not the civilian's lives. However, if used with discrimination and proportionality, drones can reduce the risk to civilians in the enemy

29 Leveringhaus, Alex, *Ethics and Autonomous Weapons*. (London: Palgrave Macmillan, 2016), 89.

30 Krishnan, Armin, *Killer Robots: Legality and Ethicality of Autonomous Weapons*, (Burlington: Ashgate Publishing, 2009), 102.

31 Best, Geoffrey, *War & Law Since 1945*, (Oxford: Clarendon Press, 1994), 14.

32 Bachmann, Klaus and Fatić, Aleksandar, *The UN International Criminal Tribunals: Transition Without Justice*, (London: Routledge, 2015), 205.

territory since they are a much more precise instrument than other forms of military violence such as artillery strikes. How far should the military personnel be protected from harm?

If drones are used in the internationally defined space of war the ethical question would be debatable. Shooting a regular soldier on the battlefield with ground troops or manned aircraft is no different from drones in the same context.³³ If the mission could be completed using manned vehicles without problems, then the same mission can be accomplished with drones as there are already established ethical guidelines for soldiers to follow. The real objection to drones is the issue of proportionality.

Drones can further be criticised at a social level because of their serious impact on the social fabric of the society where they are being employed. Drones do not only have an impact on their target but also create fear throughout society.³⁴ African people believe in helping one another, but people will be afraid to help victims of a drone attack. There will be distrust in the community because informants will place trackers on possible targets. Communities do not trust each other as they do not know who will turn them into the government for a possible drone strike. This was the case during the apartheid times when communities were turning each other into police, and some were killed by the very same police. Therefore, there is still a trust deficit within societies.

But from the just war theory perspective of *Jus ad Bellum*, drones could perhaps meet the criteria of just cause and not the criteria of last resort.³⁵ Last resort does not mean to try all possible policies before engaging in war but to seriously consider what is possible. Drones promote the use of force without going into a full-scale war. Bureaucracies are not concerned

33 Lucas, G., *Military ethics What everyone needs to know*, (Oxford: Oxford University Press, 2015), 171.

34 Boyle, M.J. The cost and consequences of drone warfare. *International Affairs* 89(2013), 21.

35 Braun, M. and Brunstetter, D.R., Rethinking the criterion for assessing cia-targeted killings: Drones, proportionality and jus ad vim, *Journal of Military Ethics* 12 (2013), 319.

about moral problems, and this will always affect how states approach drones. One of the anti-war advocates, Madea Benjamin, is of the view that drones make war easy. Given the experience of World War I and II, the Vietnam War, and many other small wars, the people do not see the repercussions and horrors of war and are not personally affected.³⁶ The public does not experience their parents, brothers, children, and sisters being killed in war and as a result, war becomes easy and meaningless. It is difficult after the war to find people who condemn it and say “never again.”

During and after World War I and II and the Vietnam War among others, people knew someone who experienced war, or someone who died or got injured in the war. There was evidence as the community observed coffins or body bags returning home. In 2011 former United States President Obama used airpower and drones to remove Libyan President Muammar Kaddafi from power. A drone strike disabled Kaddafi’s motorcade, and in the process of fleeing the scene, Kaddafi was captured and executed by Libyan insurgents. Obama did so without approval from the United States Congress and defended his actions as the government only utilized airpower not ground troops.³⁷ Obama argued that he did not require authorization from Congress under the War Power Resolution because there was no sustained conflict. Knowing the power of African leaders, these drones could be used loosely in South Africa citing the same reasons. They could also be used internally to target the South African people. Without legislative and policy frameworks from international regulatory bodies like the United Nations regulating the use of drones, civilians will continue to suffer in wars with absolute impunity. There must be ways to hold governments ethically accountable for the senseless killing of innocent civilians.

36 Benjamin, M, “*Drone warfare: Killing by remote control*”, (London: Verso. 2013), 150.

37 Benjamin, M, “*Drone warfare: Killing*, 153.

ETHICAL APPROACHES

Societies are daily confronted with moral dilemmas presented by technology. These moral dilemmas are visible on the front page of newspapers, confront us in our work environment, from our children's school grounds, and bid us good night on our television screens. They raised questions about the justice of our foreign policies, the human rights of our homeless, the morality of medical technologies that can prolong our lives and the way wars are fought.³⁸ It is often perplexing to deal with these moral issues. What is the best way to think of ethical issues? What kind of questions should we ask when thinking about these ethical issues? What are the factors for consideration? Analyzing moral issues is not easy and requires one to get the facts right. Facts sometimes are just not good enough as they tend to tell us what is, not what ought to be. Furthermore, resolving ethical concerns also needs an appeal to values. There are four different approaches to values when dealing with moral concerns as developed by philosophers.

The Rights approach

The Rights Approach is based on respect for human dignity. This approach maintains that our dignity is based on our capacity to freely choose how we live our lives.³⁹ People have a moral right to respect our choices as free, equal, and rational, and a moral duty to respect others in the same way.⁴⁰ Rights might include the right to privacy, and to be safe from any harm and injury. A good understanding of human rights can be drawn from the United Nation's Universal Declaration of Human Rights. The rights approach requires people to recognize the legal rights of themselves and others, in each situation, as well as our duties and obligations.⁴¹ When faced with contradictory or competing interests or rights, we must choose the one

38 Benjamin, M, *Drone warfare: Killing*, 154.

39 Benjamin, M, *Drone warfare: Killing*, 154.

40 Benjamin, M, *Drone warfare: Killing*, 154.

41 Benjamin, M, *Drone warfare: Killing*, 154.

which interest has greater merit and prioritize the right that best safeguards or guarantees that interest. For example, according to the South African Constitution, everyone has the right to freedom of speech but this right has limitations as citizens cannot freely express hate speech or infringe on others' rights in their expression of free speech.⁴² Therefore, freedom of speech is a right but, it cannot infringe on someone's rights.

The father of the rights approach is philosopher Immanuel Kant who stated, "Act so that you treat humanity, whether in your personal life or in that of another, always as an end and never as a means only."⁴³ The rights approach contradicts the utilitarian approach that seeks to maximize good over harm. Some of these rights are expressed in the South African Constitution and the Bill of Rights such as the right to life, human dignity, freedom, free speech, and assembly; freedom of religion; and property ownership, among others.⁴⁴ Rights are warranted claim on others. As in the Constitution, there is a right to life, and no one is allowed to kill another or interfere with their right to life.

Thinking about the trolley situation where the driver observes a train about to kill five workmen. The driver can switch the rail where the train will only kill one workman. The driver can either leave the train to kill five workmen or switch the rails and kill one workman. The utilitarian might support the approach of killing one workman as it achieves good over harm.

42 The Republic of South Africa, *The Constitution of the Republic of South Africa*, 1996. Pretoria, Government

43 Bonnie Costello, Marianne Moore: *Imaginary Possessions* (Cambridge, MA: Harvard University Press, 1981), 78.

44 The Constitution of the Republic of South Africa.

Virtue Ethics

Virtue is a *hexis*, a disposition or habit.⁴⁵ People are not born with virtues but acquire them through practice.⁴⁶ Virtue is not about acting in a particular way but also feeling in a certain way. It is about compassion, and a compassionate person not only acts in a certain way that helps alleviate the suffering of others but also has certain kinds of feelings towards their suffering. Virtue is a trait of character worth having, it is something that can be acquired, mainly through training and practice not to be understood as an inherited or God-given quality, but as something that can be.⁴⁷ Virtue ethics aim to ensure moral behavior by instilling certain virtues such as loyalty, honesty, and courage in order to create a good character. But how, do people acquire these virtues?

Plato appears to have held what is called a Socratic conception of virtue (learned from his teacher, Socrates).⁴⁸ In other words, to know the good is to do the good. This implies that wisdom is the foundation of all virtues. Plato believed in the unity of the virtues. He also believed that virtue is enough for pleasure - there is no such thing as moral luck.⁴⁹ Aristotle however has a contradicting view of that of Plato.

According to Aristotle, knowing the good was not enough. Even though Aristotle did not necessarily have a concept of free will (this is a later, largely Christian idea), he believed that one needs to practice virtue - to be virtuous one must habituate oneself. Aristotle believed that although virtue is necessary for the good life it is not sufficient. That is to say, you can be

45 Lawrence, M. Hinman, *Ethics A pluralistic approach to moral theory*, 5th ed., (Cengage: New York, 2013), 257.

46 Lawrence, M. Hinman, "Ethics A pluralistic approach to moral theory, 257.

47 Olsthoorn, P, "Conventional ethics in the military," Paper presented at the United States Air Force Academy, 2006.

48 Rhodes, B, *An introduction to military ethics: A reference handbook*, (California: Clio. 2009), 13.

49 Rhodes, B, *An introduction to military ethics*, 13

virtuous but still, be unhappy. Aristotle's views are representative of Greek society, while Plato's were more radical.⁵⁰

Virtues focused on individuals, and to some observers of the virtue ethics approach incidents happening in military deployments and bases are, in fact, the result of moral flaws at the individual level.⁵¹ To a certain extent, this is not necessarily correct because unethical behaviour is frequently the result of what is now and then called the "ethical climate". The larger organization shapes it and, in the case of the military, the political leadership. People with high ethical standards can behave unethically unless they can justify their behavior.

Soldiers, Marines, Sailors, and Airmen are ethically required to serve others, obey lawful orders, and exercise required ethical behaviour.⁵² Plato spends a good deal of time on military virtues. Plato uses the analogy of a dog to explain virtues. Both soldiers and dogs must be courageous and have the wisdom of knowing what to love and what to fear. Dogs know their families, but they become wary of the unknown and will take aggressive action should the family be at risk. A good dog is prepared to do and suffer harm to defend owners and family. This is a sign of viciousness and courage. If the dog turns against its family, it will suffer harm and endure pain and it is not considered a good dog. In other words, the virtue of a good dog needs to be directed towards a good moral end. Therefore, bringing up a small dog or soldier requires a certain amount of thought and care if a good dog or a good soldier is to be the result. This is where carefully crafted training is necessary.⁵³ There are many criticisms of

50 Rhodes, B, *An introduction to military ethics*, 14.

51 Robinson, P, Ethics training and development in the military, *Parameters Spring*, (2007), 25.

52 Rhodes, B. 2009. *An introduction to military ethics*, 14.

53 Hackett, J.W, The military in the service of the state, in Wakin, M.M. (ed.) *War, morality and the military profession*. (Boulder: Westview Press, 1986). 15.

the virtue ethics approach, especially the emphasis on a character which might influence military leaders to believe that all unethical behavior is the product of a failure of character.⁵⁴

If there is some truth in this situational view, “this fundamentally means that, even if ethics education can teach virtues, it might be the case that the influence of a virtuous disposition, notwithstanding Aristotle, is at times, and possibly in particular when needed most, as limited as the influence of codes of conduct imposed by the organisation; codes that at least to some degree shape the ethical climate within the military.”⁵⁵ Ethics education, for that reason, should probably not only aim at promoting virtues but also, with the situational view in mind, at giving insight into the factors that make unethical conduct more likely to take place. The products of social science, too, and not only philosophical texts, should have their place in any military ethics.⁵⁶

Deontological Ethics

The duty-based approach that is sometimes referred to as deontological ethics is associated with the philosopher Immanuel Kant.⁵⁷ Kant argued that doing right is about having the right intention to act, and it is not about the consequences of our actions. Ethical action is based on duty, which is done because of our obligation to act. Kant’s well-known formula for discovering our ethical duty is called the “categorical imperative.”⁵⁸ It has several versions of which Kant believe all amounted to the same imperative.

54 Stephen, C, The Problems of Duty and Loyalty. *Journal of Military Ethics*. 8 (2009), 110.

55 Peter Olsthoorn, *Military Ethics and Virtues: An Interdisciplinary Approach for the 21st Century*, (Routledge, Amsterdam, 2010), 95.

56 Peter Olsthoorn, *Military Ethics and Virtues*, 95.

57 Arneson, R., *Deontology’s Travails Moral Puzzles and Legal Perspectives*, (Cambridge: Cambridge University Press, 2019), 355.

58 Aboodi, R., A. Borer, and D. Enoch, “Deontology, Individualism, and Uncertainty: A Reply to Jackson and Smith,” *Journal of Philosophy*, 105 (2008), 250.

We all have moral obligations to others; if we do not fulfil these obligations, then we are acting unethically. As a father it is my duty to look after my children, take them to school, feed them, and take them to the doctor. The major challenge of deontology is to determine the basis of our duties and the nature of our duty. For Christians, ethical duties are defined by the Ten Commandments. But to non-Christians, those duties are not binding. Therefore, it is difficult to use religious-based deontology to provide a common framework for society's ethics. According to Kant, humans are inherently rational beings, therefore our ethical duties are derived from rationality.⁵⁹ Many scholars have argued that duties can be defined on other bases. Immanuel Kant argued that reason alone can be used to define duty. Africans have long understood the ethics of duty through *Ubuntu*. *Ubuntu* as a moral theory has a duty to human dignity. In the African culture, an individual must feed the hungry and care for the needy without expecting anything in return. Soldiers have human rights and must respect them, they must treat one another with respect including the belligerent.

Utilitarianism

Utilitarianism is a type of consequentialist philosophy. It is an ethical theory that distinguishes right from wrong, and it is from consequentialism. Utilitarianism holds that the best ethical choice is the one with the greatest good for the greatest number. This is the best moral framework to justify the use of drones in warfare. It is a common approach to moral reasoning because of the way it counts for costs and benefits. The limitation of utilitarianism is that it is not easy to know the consequences of our actions because the future is unpredictable. Many times, consequences only come long after the action.

⁵⁹ Robert M Taylor, Ethical principles and concepts in medicine, Handbook of Clinical Neurology, accessed March 18, 2021, https://www.researchgate.net/publication/258250395_Chapter_1_Ethical_principles_and_concepts_in_medicine

With utilitarianism, it is assumed that a) the decision-maker is aware of the consequences of the action; and b) the intended consequences will be achieved. It is difficult to measure intent or even observe it. In any hypothetical situation, the variables can be constant, but the real-life situation is complicated. Analyzing the use of drones in South Africa is complicated. The question is, does the use of drones produce the best or less harm?⁶⁰ The answer to this question lies in the literature and the history of drones in the United States and many other countries. As mentioned earlier, it is often difficult to predict the consequences of drones but, at times history may provide direction and answers.

UBUNTU APPROACH TO ETHICS

When reading about ethics, one is always confronted with the Western perspective from Western scholars. The paper does not suggest that there is something wrong with the western scholars and their perspective, but they tend to lose touch with the African way in their writings and analysis. South Africans have a belief called *Ubuntu*. But what is *Ubuntu* and what constitutes it? *Ubuntu* is the Afrocentric philosophy that seeks to provide moral guiding principles.⁶¹ It is about sisterhood or brotherhood and the collective unity for survival. The value system of *Ubuntu* is derived from the Jewish and Christian Scriptures of the Bible.

The book of Proverbs comprises some injunctions that capture several aspects of what represent significant features of the Spirit of *Ubuntu*. People must strive to implant these features in the very heart of South Africa. *Ubuntu* is what makes everyone to be proud of who they are. The Proverbs say: “Withhold not good from them to whom it is due when it is in the power of thine hand to do it. Say not unto thy neighbor, Go, and come again, and tomorrow I will give; when thou hast it by thee” (Proverbs 3 27). “Devise not evil against thy neighbor,

60 Meylahn, J.A. and Musiyambiri, J, *Ubuntu* leadership in conversation with servant leadership in the Anglican Church: A case of Kunonga, Accessed March 18, 2022, [tps://hts.org.za/index.php/hts/article/view/4509/0](https://hts.org.za/index.php/hts/article/view/4509/0).

61 Meylahn, J.A. and Musiyambiri, J, *Ubuntu* leadership in conversation with servant.

seeing he dwelleth securely by thee. Strive not with a man without cause, if he has done thee no harm. Envy thou, not the oppressor and choose none of his ways” (Proverbs 3 27).

The book of Proverbs undertakes human beings to have the capacity to do as it says, not to withhold the good from them to whom it is due when it is in the power of (our) hand to do it, and not to say no to our neighbor, come again, and we will give you something tomorrow, even when we can give the necessary help today. Proverbs assume that people can be encouraged not to devise evil against their neighbors, with whom they live in harmony. All of the above shows that *Ubuntu* is important in South Africa, and it also receives attention from the Government. Proverbs demonstrates what *Ubuntu* is all about.

Ubuntu is a strategy for collective survival using group care in contrast to individuality.⁶²

This survival and group care were seen in the struggle against apartheid through the slogan “An injury to one is an injury to all”. The evolution and transition that South Africa went through necessitate the nurturing of *Ubuntu* values. *Ubuntu* can marry the Eastern, Western and African ideologies to achieve a better society.⁶³

62 Alfred, M. and Porter, M, *Investigating Ubuntu*. (Johannesburg: Manpower Briefs, 1996), 15.

63 Mbigi, L. and Maree, J, *Ubuntu: The spirit of African transformation management*, (Randburg: Knowledge Resources, 1995), 10.



To have a better society, Mbigi proposes the collective finger theory as the key shared social values of *Ubuntu*. This theory is best explained by the African Proverb of a thumb. Although a thumb is considered strong, it cannot function on its own as it requires the assistance of other fingers.⁶⁴ The rationale behind this proverb is twofold. One, the finger represents individuals working together collectively to achieve a common goal. Two, the fingers symbolize key values required to make and sustain a collective culture. Mbigi contends that the five key values are respect, dignity, solidarity, compassion, and survival. Many scholars purport that these values have been part of African culture for centuries.⁶⁵

Survival

Survival is considered the heart of *Ubuntu*. Despite all the challenges, distress and difficulties, Africans still exist and live. They are heavily reliant on each other for brotherly caring. Their resources and strength are combined and used to create communities. Survival is a shared will to survive as you share the little with others. The value of togetherness and

⁶⁴ Mbigi L, *The African Dream in Management*, (Randburg: Knowledge Resources, 1997), 45.

⁶⁵ Poovan, N., Du Toit, M.K. and Engelbrecht, A.S. The effect of the social values of *Ubuntu* on team effectiveness, *South African Journal of Business Management*. 37 (2006), 16.

brotherhood/sisterhood all belong to this concept.⁶⁶ For survival, people rely on each other to increase effectiveness. They make sacrifices for the benefit of the team. This is where cultural differences are put aside for survival. Individual as part of the community becomes part of extended family. These are not biological bonds, but they are bonds of solidarity.

South Africans say in Setswana language “*motho ke motho ka batho ba bang*” which means you are a person through other people, you are what you are because of the people around you. This is not merely making an empirical assertion that our survival depends on others. This assertion of a person is a person is a call to develop personhood to exhibit humanness.⁶⁷ The period of apartheid in South Africa was a time to display the spirit of survival.⁶⁸ South Africans have developed a shared will to survive. The military members are recruited from the society practising these values and one cannot afford to see these values diminishing with technology. Related to survival is solidarity.

Solidarity

From the collective finger theory, it is difficult to crush a grain of wheat with one finger; it requires the assistance of the other fingers.⁶⁹ Military people know more than anyone else that it takes a collective to achieve difficult goals and tasks. The individualism idea does not exist in the military. Members of the armed forces subscribe to the African Proverb, “If you want to walk fast, walk alone but if you want to walk far, walk together.” When people are made to become part of the community it will influence how the spirit of solidarity is developed. This is about how individuals collectively accomplish a difficult task and personal

66 Broodryk J, *Ubuntu- African Life Coping Skills – theory and practice*-. CCEAM Conference, Cyprus, 2006.

67 Thaddeus Metz, Ubuntu as a moral theory and human rights in South Africa, *African human rights law journal*, 2006, 353.

68 Mbigi, L. and Maree, J. *Ubuntu*, 15.

69 Mbigi L, *In Search of the African Business Renaissance*, (Randburg: Knowledge, 2000), 15.

interests are not important. There is a feeling of responsibility towards the community.

Solidarity increases the cohesion between the team members in the organization.

Compassion

From the South African viewpoint, compassion is about reaching out and practising humanity to form friendships and relationships.⁷⁰ The belief among the African people is that human beings are connected and have a shared responsibility towards each other. Africans believe that there is a larger community where everyone belongs. This embodies the slogan “you are because of other people.” The value of compassion illustrates an understanding of the other person’s problems and the desire to help them. Compassion can be connected to love. A shared vision is developed through compassion. Team members can create a shared vision through caring for and understanding each other. Understanding and caring will ultimately lead to the feeling of belonging.

Respect and dignity

Because Respect and Dignity are closely related, they are discussed together. The literature does not make any distinction between Respect and Dignity and describes them as one.

Looking at the Oxford dictionary definition, Respect is defined as due regard for the feelings and rights of others and Dignity is defined as the state or quality of being worthy of respect.

Ubuntu can be regarded as allied to Kant’s version of dignity. Respect and dignity are fundamental values in the African continent and surely in any other society, although these values are diminishing through corruption and disregard for human rights. Respect is also fundamental in the military tradition. Related to respect is dignity. An African child learns to respect those in authority such as parents, kings, elders, and other members of the

⁷⁰ Broodryk, J, *Ubuntu: Life lessons from Africa*, 14

community.⁷¹ They also learn to respect each other. Dignity encompasses values such as freedom and free will. Respect and dignity are something intrinsic and deep-rooted in personhood, irrespective of a person's social standing in the community.⁷² Section 7(2) of the Constitution states that the state must respect, protect, promote, and fulfil the rights of all its citizens. The Constitution further states that everyone has inherent dignity and the right to have their dignity respected and protected. This demonstrated the importance of respect and dignity in South Africa. Respect and dignity are the core values of African society. In the world of drones, one could ask about the role of traditional military virtues like personal humility and respect for the enemy.

Instrumental rationality of efficiency has mainly over-ridden the traditional virtue because of the corporatisation of the military. These traditional military virtues are used to define the military profession as a moral community.⁷³ But today, military leaders and business leaders belong to the same community as they often change careers by moving to corporate responsibility positions. Using drones for offensive actions is exactly the kind of military action that mirrors all the moral issues involved in the overall decay of the military profession as a moral community.

DRONES IN THE SOUTH AFRICAN MILITARY: AN ETHICAL CHALLENGE

Drones are highly controversial lethal weapons, and their use in the South African Military threatens the essence of the African Value of *Ubuntu*. Several militaries around the world are now using this lethal weapon. Initially, drones were merely a science fiction idea. They were

71 Bekker, C.J, 'Finding the 'other' in African Christian leadership: Ubuntu, kenosis and mutuality'. Paper presented at the International Conference on Value-based Leadership, University of Stellenbosch Business School, 2006, 14 to 16 March.

72 Dolamo, R. 2013. Botho/Ubuntu: The Heart of African Ethics accessed March 18, 2022, https://www.researchgate.net/publication/314114587_BOTHOUUBUNTU_THE_HEART_OF_AFRICAN_ETHICS.

73 Bachmann, Klaus and Fatić, Aleksandar, *The UN International Criminal Tribunals: Transition Without Justice*, (London: Routledge, 2015), 102.

introduced like anti-aircraft and anti-defence systems to defend military vessels from aircraft and projectiles autonomously, with the operator only setting the parameters for the targeting system⁷⁴. Related systems were later accepted for use on missile and tank defence systems. Drones were never used to target people directly but only fired at the vehicles. Computers made it possible to alter algorithms to be more effective. In today's environment, although still operated by humans, drones are starting to target humans or are used on humans. This use of drones in warfare raises several ethical concerns.

According to the United Nations, there are at least 102 countries with active military drones, and around another 40 are procuring them.⁷⁵ More than 30 countries are believed to possess several of the deadliest classes and ten countries used drones for target killing. Turkey used drones internally against the Kurdistan Workers' Party and Nigeria used them to carry out strikes against Boko Haram.⁷⁶ Although Boko Haram is an insurgency, it is from the local population. Pakistan used drones on three high profile terrorists in 2015. On 03 January 2020 a United States drone struck the Baghdad International Airport killing Iranian General Qassem Soleimani. Not only did the drone kill the General but it also killed nine other people. The killing of General Soleimani was condemned by many as he was not in battle but in a foreign country as a guest to the President. Although Soleimani was linked to terrorist groups, his killing in a foreign country raises many questions. In August 2021, a United States drone also struck Kabul and killed ten civilians. It is important to note that drones don't kill but people do. The purpose of this paper is not to highlight the suffering caused by drones in individual countries, but this is important to set the scene. Drones operators often

74 The United Nations, Human Rights Council Forty-fourth session 15 June–3 July 2020 Agenda item 3 Promotion and protection of all human rights, civil, Political, economic, social and cultural rights, including the right to development Use of armed drones for targeted killings. Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions, 4.

75 The United Nations, 4.

76 The United Nations, 4.

fail to effectively discriminate between the enemy and innocent civilians. Table one below shows the suffering caused by drones in Pakistan, Yemen and Somalia. These are just a few countries amongst many. Drone strikes took place in several countries but figures from other countries could not be found. The table depicts the suffering caused by drones.

Table one Bureau of Investigative Journalism: New America Foundation.⁷⁷

Country	Pakistan	Yemen	Somalia
Period	2004- 2017	2002-2017	2007-2017
Total Strikes	424	185	90-107
Total killed	2,499-4,001	1103-1389	357-509
Civillian killed	424-966	65-101	26-61
Injured	1,161-1,744	100-234	82-109

Given the above evidence, one can claim that the use of drones will lead to an increase in suffering and disregard for human life. Drone violates the African value of respect and dignity. One cannot expect drones to make a judgement call before engaging a target as it has no basic level of thinking or consciousness. A human might have some level of empathy and judgement to decide to kill or not to kill the enemy laying down weapons or who appears to surrender. Furthermore, drones possibly raise the question of *Jus in Bello* regarding the conduct of war from the just war standpoint. Although the firing decision is still made by humans, an algorithm is responsible for shooting at targets without a clear distinction between combatants and civilians. The challenge is to make a distinction between civilians and combatants and avoid collateral damage. Only humans can make that judgement with compassion and respect for life. Drones are unable to make a judgement and cannot make any complex distinction. Robert Sparrow alluded: “Before it would be ethical to deploy robots then, the systems will need to be capable of making these sorts of discriminations, all of which involve reasoning at a high level of abstraction.”⁷⁸

⁷⁷ Sparrow, Robert. “Robots and Respect: Assessing the Case Against Autonomous Weapon Systems.” *Ethics International Affairs*, 30 (2016), 99.

⁷⁸ Sparrow, Robert. “Robots and Respect: Assessing the Case Against Autonomous Weapon Systems.” 100.

South Africa comes from a devastating apartheid era where killing was normalized. People experienced dead bodies on the streets during that time and this cannot be repeated.

Irresponsible extensive use of drones could lead to the detachment of South African soldiers from war and its outcomes, consequently making it easy to engage in war. Because of improvements in drones, soldiers may be taken out of the loop which would leave the action of drones to algorithms and not moral human operators. This would leave the responsibility for the action of drones to nobody. This is described by Andreas Matthias as the responsibility gap.⁷⁹ Because of the machine automation and their capability to alter their code to adjust to the environments, the imminent danger is that the responsibility could be taken away even from the programmer of the machine. Because of the lack of meaningful human control, they create a moral accountability gap.⁸⁰ If there is a moral accountability gap when deploying drones, then it should be unethical to deploy them. Denise Garcia writes on the issue of accountability “Human dignity requires that humans should always be in the loop in matters of life and death.”⁸¹ Matters of life and death cannot be left to technology or machines. The reliance on technology that lets soldiers kill from a distance, especially with little or no threat to own force, makes it easier to wage war and thus lowers the political threshold for the decision to employ violence. As a result, drones affect certain military virtues.

With the use of drones being fully autonomous, soldiers are unable to be virtuous. As mentioned earlier, the capability to reason cannot be left with the machine. Without the capability to think and no emotion, it is impossible to ascribe virtue to machines, making

79 Matthias, Andreas. “The Responsibility Gap: Ascribing Responsibility for the Actions of Learning Automata.” *Ethics and Information Technology*, 6 (2004), 176.

80 Wendell Wallach, *A Dangerous Master: How to Keep Technology from Slipping Beyond Our Control*, accessed March 18, 2022, <https://www.hrw.org/report/2015/04/09/mind-gap/lack-accountability-killer-robots>.

81 Garcia, Denise. “Killer Robots: Why the US Should Lead the Ban.” *Global Policy*, 6(2015), 61.

their actions unethical. Even though war is a horrific activity, for years soldiers have been engaged in several virtuous activities. They have been rescuing civilians even at the risk of their life, and they have supplied civilians with goods and services. Soldiers connected with civilians in the war on a personal level and have become synonymous with their virtue of courage. Soldiers display humility and compassion. The use of such machines takes courage away from war, making it a systematic killing of people on the opposite side of the conflict. Is courage therefore still required in the military? One of the clauses in the Code of Conduct for Uniform members of the South African National Defence Force states: “I will refuse to obey an obviously illegal order.” Without virtues and morality, it will be impossible to disobey illegal orders. If drones are operated by an onboard computer, no soldier exhibits courage. This is an advantage toward saving lives on one side, but hardly an example of honor and courage.⁸² This statement is echoed by Shannon Vallor: “Because armed military robots raise the prospect of handing over the most critical kinds of military service to entities that are, at least for the foreseeable future, constitutionally incapable of it; this imperils a core ethical value shaping military culture (possibly the core value, since loyalty, courage, etc. may be viewed as extensions or implications of ethical service).”⁸³

From the virtue ethics perspective, the use of autonomous drones is unethical. Virtue ethics are based on the excellence of virtue, practical or moral wisdom, and flourishing through happiness.⁸⁴ This happiness is called Eudaimonia and reaching it was considered the goal of life by Aristotle.⁸⁵ It has been seen in recent wars that the number of casualties among civilians in a war would increase. It means that they would never be able to reach this

82 Johnson, Aaron M., and Sidney Axinn. “The Morality of Autonomous Robots.” *Journal of Military Ethics*, 12 (2013), 136.

83 Vallor, Shannon. “Armed Robots and Military Virtue.” *Law, Governance and Technology Series*, 14 (2014), 179.

84 Vallor, Shannon. “Armed Robots and Military Virtue, 179.

85 Vallor, Shannon. “Armed Robots and Military Virtue, 179.

happiness, and therefore it would be unethical. Furthermore, wars would be easier to start and no one would be directly responsible for the actions of machines.⁸⁶ People who die in these wars would be denied flourishing. This plays against the concept of virtue, and by extension the theory of virtue ethics. Aristotle writes this about the nature of virtue: “To sum up: Virtue is about pleasures and pains; the actions that are its source also increase it, or if they are done badly, ruin it; and its activity is about the same actions as those that are its sources.”⁸⁷ This statement indicates that virtue is between two vices. Because machines do not have voices, they cannot have virtues.

This paper proposes deontology as an approach to *Ubuntu* and at the same accepts that the approach to virtue ethics appears to represent more closely what several writers consider it to be *Ubuntu*. The paper accepts the need to accept the ambiguity of the word and the nuance, flexibility, and fluidity of *Ubuntu* value. It must also be acknowledged that any fundamental ethical principle or ethical theory worth being taken seriously has both deontological and consequentialist attributes. Kant would probably believe that this categorical imperative creates obligations that are right in virtue and surpass any consequences.⁸⁸ The paper adopts a deontological approach not because there is a superior approach to ethics but because making ethical decisions, especially in the military context, becomes easily interpreted and implemented when rules are applied. The use of drones in the SA military threatens the values of *ubuntu* such as dignity, empathy, and harmony between the soldiers and the society.⁸⁹

There is a never-ending debate on the actual definition of *Ubuntu* and its ethical relations.

This term has always been part of Africa and the business world but not in the military.

⁸⁶ Johnson, Aaron M., and Sidney Axinn. “The Morality of Autonomous Robots, 137.

⁸⁷ Garcia, Denise. “Killer Robots: Why the US Should Lead the Ban.”63.

⁸⁸ Vallor, Shannon. “Armed Robots and Military Virtue. 180

⁸⁹ Eygelaar, S. 1998. ‘Ubuntu – sharing African values’, *Milmed*, (1998), 20.

Ubuntu has seen its way in the Constitutional Court.⁹⁰ However, currently, with the introduction of drones in the South Africa National Defence Force, there seems to be nothing written about the danger and their ethical implications. There is no real principle of right action to base any ethical decisions or to build a normative ethical framework, especially if, with future technological advances, they become fully autonomous drones.⁹¹ There is no policy or SWP for drone operations in South Africa. There is no amendment to the current doctrine to incorporate technology. This is going to be a trial-and-error exercise for South Africa.

THE ETHICAL APPROACH OF *UBUNTU*

There are four approaches to the understanding of *Ubuntu* as an Afrocentric ethical principle and its ethical connotation. To find a rule-based theory of right action by which to define the behavior of *Ubuntu* a deontological approach is relevant. To determine, somehow, what type of *Ubuntu* behavior minimizes harm or maximizes good in the community and the people a deontological approach is applicable. But, to understand and define the type of people we should be, and what type of character traits we should display if we are to personify *Ubuntu*, we should adopt virtue ethics. However, because *Ubuntu* is mainly community-based, while the normative theories above are more individualistic, it is “impossible for the same theories to make inroads in non-Western cultures’ where such theories ‘have problems of cultural validation.’”⁹²

COUNTERARGUMENT

An obvious counterargument to this would be to ensure that the machines are sophisticated enough to decide and comply with all the international laws of war. They can also be made

90 Cornell, D., Muvangua, N. (eds) 2012. *Ubuntu and the Law: African Ideals and Postapartheid Jurisprudence*. New York: Fordham University Press.

91 Vallor, Shannon. “Armed Robots and Military Virtue. 180

92 Mangena, F, “Towards a hunhu/ubuntu dialogical moral theory”, *Phronimon* 13 (2015), 7.

able to reason so they can make an informed judgement before taking any action. Currently, doctors are still not sure how human brains process thoughts, therefore trying to develop a machine that is better at reasoning than a human seems virtually impossible. This sentiment is echoed by Sparrow: “It is difficult to imagine how any computer could make these sorts of judgments short of the development of a human-level general intelligence – that is, “strong” AI .”⁹³ Using drones is a matter of choice by governments. Better policies are required to manage the use of drones by militaries around the world. Drones can be useful if they comply with government policies and those using them are held accountable. Technology such as drones is not the only contributor to the moral decay of societies. In our military today, there is rape, murder, corruption and abuse to mention a few. These barbaric actions are not perpetuated by technology but by evil desire and lack of respect for humanity. Although drones are being introduced into the South African military, they cannot be fully blamed as individuals have a choice. Furthermore, drones are operated by humans and cannot make decisions on their own. The reality is that drones are still controlled by human operators, and humans are the ones who make the decisions. In many drone strikes where mistakes were made, humans are responsible for those errors, not drones.

CONCLUSION

This paper aimed to analyze the use of drones as an emerging technology in the South African National Defence Force. Despite their efficiency and exposing soldiers less to danger, drones bring moral dilemmas to the military and society. If human operators are taken out of the loop, they are inhumane and lack the human intelligence to distinguish between right and wrong. As a result, it becomes easy to engage a target that cannot be seen. The military community is losing one of the most important virtues in battle, courage. Drone

93 Vallor, Shannon. “Armed Robots, 182.

operators require no courage as they operate them in their comfort. Using drones in South Africa could impact the essence of the African value of *Ubuntu*. This could threaten civil-military relations that were built after it collapsed during the apartheid time. The South African military worked hard to win the hearts and minds of the civilian community.

BIBLIOGRAPHY

If Aboodi, R., A. Borer, and D. Enoch, “Deontology, Individualism, and Uncertainty: A Reply to Jackson and Smith,” *Journal of Philosophy*, 105 (2008), 250. 259–272.

Aleksandar Fatic, The Ethics of Drone Warfare FILOZOFIJA I DRUŠTVO XXVIII (2), 2017, 362 (349-364).

Alfred, M. and Porter, M, *Investigating Ubuntu*. Johannesburg: *Manpower Briefs*, 1996.

Aristotle, and Terence Irwin. *Nicomachean Ethics*. Massachusetts: Cengage, 1999.

Arneson, R., *Deontology's Travails Moral Puzzles and Legal Perspectives*, Cambridge: Cambridge University Press, 2019.

Bachmann, Klaus and Fatić, Aleksandar, *The UN International Criminal Tribunals: Transition Without Justice*, London: Routledge, 2015.

Bachmann, Klaus and Fatić, Aleksandar, *The UN International Criminal Tribunals: Transition Without Justice*, London: Routledge, 2015.

Bekker, C.J, ‘Finding the ‘other’ in African Christian leadership: Ubuntu, kenosis and mutuality’. Paper presented at the International Conference on Value-based Leadership, University of Stellenbosch Business School, 2006, 14 to 16 March.

Bell, D.M. *Just war as Christian discipleship: Recentering the tradition in the church rather than the state*, Grand Rapids, MI: Brazos Press, 2009.

Benjamin, M, “*Drone warfare: Killing by remote control*”, London: Verso. 2013.

Best, Geoffrey, *War & Law Since 1945*, Oxford: Clarendon Press, 1994.

Bonnie Costello and Marianne Moore, *Imaginary Possessions*, Cambridge, MA: Harvard University Press, 1981.

Boyle, M.J., The cost and consequences of drone warfare. *International Affairs*, 89 (2013), 1-32.

- Braun, M. and Brunstetter, D.R., Rethinking the criterion for assessing CIA-targeted killings: Drones, proportionality and jus ad vim, *Journal of Military Ethics* 12 (2013), 304-324.
- Broodryk J, *Ubuntu- African Life Coping Skills – theory and practice-*. CCEAM Conference, Cyprus, 2006.
- Charles Guthrie and Michael Quinla, *The Just War Tradition: Ethics in Modern Warfare*, New York: Walker & Company, 2007.
- Cornell, D., Muvangua, N. (eds), *Ubuntu and the Law: African Ideals and Postapartheid Jurisprudence*, New York: Fordham University Press, 2012.
- Darrell Cole, “War and Intention”, *Journal of Military Ethics*, 10 (2011), 174-191.
- Dolamo, R. 2013. Botho/Ubuntu: The Heart of African Ethics, March 18, 2022, https://www.researchgate.net/publication/314114587_BOTHUBUNTU_THE_HEART_OF_AFRICAN_ETHICS.
- Van Dyk G.A.J. & Nefale M.C.. 2005. The Split-Ego Experience of Africans: *Ubuntu*
- Eygelaar, S. 1998. ‘Ubuntu – sharing African values’, *Milmed*, (1998), 15-28.
- Fotion, Nicholas, *War and Ethics: a new just war theory*, (London: Continuum, 200).
- Garcia, Denise. “Killer Robots: Why The US Should Lead The Ban.” *Global Policy*, 6 (2015), 57-63.
- Guthrie, Charles and Quinlan, Michael, *Just War, The Just War Tradition: Ethics in Modern Warfare*, New York: Walker & Company, 2007.
- Hackett, J.W, The military in the service of the state, in Wakin, M.M. (ed.) *War, morality and the military profession*, Boulder: Westview Press, 1986.
- JACKSON T., 2004. Management and change in Africa. A cross-cultural perspective. London:
- James, M., Dubik, *Just War Reconsidered: strategy, ethics and theory*, Kentucky: University of Kentucky Press, 2016.

- Johnson, Aaron M., and Sidney Axinn. "The Morality of Autonomous Robots." *Journal of Military Ethics*, vol. 12, no. 2, 2013, 129-141.
- Johnson, Aaron M., and Sidney Axinn. "The Morality of Autonomous Robots." *Journal of Military Ethics*, 12 (2013)125-139.
- Krishnan, Armin, *Killer Robots: Legality and Ethicality of Autonomous Weapons*, Burlington: Ashgate Publishing, 2009.
- Lawrence, M. Hinman, *Ethics A pluralistic approach to moral theory*, 5th ed., Cengage: New York, 2013.
- Leahy, Mary-Kate. "Keeping Up with the Drones: Is Just War Theory Obsolete?" U.S. Army War College Carlisle Barracks (2010).
- Leveringhaus, Alex, *Ethics and Autonomous Weapons*, London: Palgrave Macmillan, 2016.
- Luban, David, *Risk-taking and force protection*. New York: Routledge, 2014.
- Lucas, G., *Military ethics What everyone needs to know*, Oxford: Oxford University Press, 2015.
- McMahan, Jeff. *Killing in War*, Oxford: Clarendon Press, 2009.
- Mangena, F. 2012. 'Towards a *hunhu/ubuntu* dialogical moral theory', *Phronimon* 13(2), 1–17.
- Matthias, Andreas. "The Responsibility Gap: Ascribing Responsibility for the Actions of Learning Automata." *Ethics and Information Technology*, 6 (2004), 175-183.
- Mbigi L. *The African Dream in Management*. Randburg: Knowledge Resources, 1997.
- Mbigi L. 2000. *In Search of the African Business Renaissance*, Randburg: Knowledge, 2000.
- Mbigi, L. and Maree, J, *Ubuntu: The spirit of African transformation management*, Randburg: Knowledge Resources, 1995.

- Meylahn, J.A. and Musiyambiri, J, *Ubuntu leadership in conversation with servant leadership in the Anglican Church: A case of Kunonga*, Accessed March 18, 2022, [tps://hts.org.za/index.php/hts/article/view/4509/0](https://hts.org.za/index.php/hts/article/view/4509/0).
- Michael Quinlan, “Justifying War”, *Australian Journal of International Affairs*, 58, (2004): 7-15.
- Nääf, Amanda. “Droning toward a Shift in the Morality of War? A Just War Approach to the United States Use of Drones in the War on Terror” (PhD diss., Lund University, 2011).
- Peter Olsthoorn, *Military Ethics and Virtues: An Interdisciplinary Approach for the 21st Century*, Routledge, Amsterdam, 2010.
- Poovan, N., Du Toit, M.K. and Engelbrecht, A.S. The effect of the social values of *Ubuntu* on team effectiveness, *South African Journal of Business Management*. 37 (2006), 16-36.
- Robbinson, P, Ethics training and development in the military, *Parameters Spring*, (2007), 1-26.
- Holmes, Robert L. *War and Morality*, New Jersey: Princeton University Press, 1989.
- Taylor, Robert M Ethical principles and concepts in medicine, *Handbook of Clinical Neurology*, accessed March 18, 2021, https://www.researchgate.net/publication/258250395_Chapter_1_Ethical_principles_and_concepts_in_medicine
- Sparrow, Robert. “Robots and Respect: Assessing the Case Against Autonomous Weapon Systems.” *Ethics International Affairs*, 30 (2016), 99. 93-116.
- Stephen, C, The Problems of Duty and Loyalty. *Journal of Military Ethics*. 8 (2009), 208. 105-115.
- Thaddeus Metz, Ubuntu as a moral theory and human rights in South Africa, *African human rights law journal*, (2006), 352-553.
- The Holy Bible, New Revised Standard Version Catholic Edition, Matthew 26:52.

The Republic of South Africa, *The Constitution of the Republic of South Africa*, 1996.
Pretoria, Government Printer.

The United Nations, Human Rights Council Forty-fourth session 15 June–3 July 2020
Agenda item 3 Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development Use of armed drones for targeted killings. Report of the Special Rapporteur on extrajudicial, summary or arbitrary executions.

Thomas Aquinas, Fathers of the English Dominican Province, *Summa Theologica*, 1960.

Vallor, Shannon. “Armed Robots and Military Virtue.” *Law, Governance and Technology Series*, 14 (2014), 179.

Walzer, Michael, “World War II: Why Was This War Different?”, *Philosophy & Public Affairs*, 1 (1971): 3-21.

Walzer, Michael. *Just and Unjust Wars: A Moral Argument with Historical Illustrations*, New York: Basic Books, 2015.

Wendell Wallach, A Dangerous Master: How to Keep Technology from Slipping Beyond Our Control, accessed March 18, 2022, <https://www.hrw.org/report/2015/04/09/mind-gap/lack-accountability-killer-robots>.

Timothy P. Schutz, “Remote warfare: A new architecture of Air Power”. In: *Airpower in the age of Primacy*. Ed., Phil M. Haun, Colin F. Jackson & Timothy P. Schultz, Cambridge: Cambridge University Press, 2022.