Covenant University Journal of Politics & International Affairs, Special Issue(2) on Leadership and Development, September, 2025
ISSN: p. 2354-3558 e. 2354-3493 DOI: xxxxxxxxxxxxxxx
Open Access Journal Available Online

The Militarization of Artificial Intelligence: Implications for Modern Warfare and Global Security

Goddy Uwa Osimen
goddy.osimen@covenantuniversity.edu.ng
Covenant University, Ota, Nigeria.
and
Odeigah Theresa Nfam
odeigah.tn@unilorin.edu.ng
University of Ilorin,Ilorin, Nigeria
and
John Ehiabhi Anegbode
johnamalu1@aauekpoma.edu.ng
Ambrose Alli University, Ekpoma, Nigeria
and
Akande Clement Olukayode
akandeclemento@gmail.com
Rufus Giwa Polytechnic Owo,Nigeria

Paper selected from 2nd Covenant University Conference on Leadership and Development (CUCLeD), June 11-13, 2025

Abstract: The integration of Artificial Intelligence (AI) into military operations poses significant challenges to global stability and international security, underscoring the need for a comprehensive understanding of its implications. This study examines the militarization of AI in modern warfare through the lens of Deterrence and Social Identity Theory, which provides a framework for proper understanding of the study of militarization of artificial intelligent in warfare. Using a qualitative and descriptive approach, this study analyzes secondary data from peer-reviewed journals, military documents, and policy reports to explore the impact of AI-driven technologies on modern defence systems. The findings suggest that while AI enhances military capabilities, it also raises critical concerns regarding accountability, transparency, and unintended consequences. The study highlights the importance of balancing defence needs with humanitarian considerations and

calls for further exploration of AI governance and international norms

Keywords: Artificial Intelligence (AI), Securitization Theory, Defence Modernization, Global Security, Autonomous Warfare, Humanitarian Law

Introduction

Over the course of history, the drive for technological advancement has been justified as a way to establish superiority in warfare. As trench warfare was left behind, the emphasis in combat shifted from physical confrontation to the realm of digital warfare. At first, technology was utilized to create more potent weapons, but its use quickly expanded to include mechanized warfare, marking the dawn of a new era. (Military Africa, 2023). As technological advancements reached a plateau, there was a significant increase in funding for scientific research, leading to the creation of devastating weapons such as bombs and nuclear armaments. Concurrently, computer research also experienced a surge in growth.

Also, over time, war has typically been seen as a direct and violent conflict. However, the traditional concept of war has changed due to advancements in military technology. This change has expanded the definition of war to include more passive tactics. The introduction of Artificial Intelligence (AI) in warfare has allowed for the use of lethal autonomous systems, small arms and light weapons, and three-dimensional (3D) printing (Currie, 2022). The discovery of gunpowder in medieval China is the starting point for the technological advancements in warfare. This revolutionary invention led to significant progress in combat. By experimenting with a medicinal compound, the Chinese successfully created a projectile known as a "bullet," which could be propelled up to 10 feet. This momentous achievement played a crucial role in shaping the future of weaponry and tactics in warfare (Alius, 2018).

Gunpowder, which reached Europe by the 13th century, was carefully documented in its development by the English philosopher Roger Bacon. Its integration into siege warfare was a gradual process as knowledge of its use spread. Historically. gunpowder was refined, leading to the invention of muskets in the 16th century, forever changing the dynamics of combat with their long-range capabilities (Epstein, 2022).

These advancements laid the foundation for the automation of military tasks, while technology-assisted warfare gave rise to communication and information analysis technologies that surpassed the capabilities of unaided human operators. As a general-purpose enabling technology, AI has many potential applications to national defense. Military use of AI is likely to be as widespread as military use of computers or electricity.

Hence, the militarization of Artificial Intelligence (AI) integrates AI into military systems to gain a strategic advantage, leading to enhanced capabilities like autonomous weapons, improved decision-making, and more efficient targeting. Although, AI has become an integral part of modern warfare, revolutionizing the way conflicts are conducted consequently, fuels concern about escalating conflicts, potential misuse, and an AI-driven arms race, necessitating international cooperation for robust AI governance and regulation to ensure peace and prevent ethical breaches (Osimen, Fulani, Chidozie, & Dada, 2024).

The integration of Artificial Intelligence (AI) into military systems has profoundly transformed the nature of warfare, with far-reaching implications for global security and stability (Rolly et al., 2022). AI-powered autonomous systems, cyber weapons, and advanced navigation capabilities are redefining modern warfare (Military Africa, 2023). Autonomous systems combine AI and modern artillery,

enabling the development of sophisticated military equipment, including lethal and non-lethal gadgets (Marwala, 2023). AI enhances military capabilities by facilitating quicker decision-making, more accurate targeting, and efficient resource allocation. Additionally, AI-powered autonomous weapons can operate without human intervention, potentially reducing the risk to human soldiers (Marwala, 2023).

AI has various applications in military contexts, including autonomous weapons systems, cybersecurity, logistics, combat simulation, and training (Military Africa, 2023). In cybersecurity, AI helps detect and counteract cyber threats more efficiently, while in logistics, it streamlines supply chain management (Marwala, 2023). AI also contributes to battlefield healthcare, assisting in medical diagnosis and treatment in combat zones (Marwala, 2023). Furthermore, AI enhances threat monitoring and situational awareness, providing real-time data analysis to inform strategic decisions.

However, the increasing reliance on AI in military operations poses significant challenges to global security, including the potential for unintended consequences, escalation, and destabilization. The use of AI in combat situations raises concerns regarding responsibility, transparency, and compliance with humanitarian principles (Boulanin, 2020). There is a pressing need to carefully consider the ethical, legal, and strategic implications of AI integration in military operations to ensure that its benefits are harnessed while minimizing risks to global stability.

There is no doubt that, the integration of AI in military operations presents a complex challenge, balancing the benefits of enhanced military capabilities with the risks of unintended consequences, escalation, and destabilization, highlighting the need for a nuanced understanding of its implications on global security

frameworks.

Hence, the main objective of this study is to investigate the implications of AI integration in military operations on global security frameworks, with a focus on balancing benefits and challenges. The research question guiding this study is therefore, how can the integration of AI in military operations be optimized to enhance national security while minimizing risks to global stability and upholding humanitarian values?

Conceptual Review

The Concept of Artificial Intelligence

Artificial intelligence (AI) has garnered significant attention in recent years, particularly in 2023, but its history stretches back to the post-World War II era when computers were first developed. A pivotal moment in AI's history was the Dartmouth Conference in 1956, where researchers from various fields gathered to explore the concept of "thinking machines" (McCarthy, 1956). This conference marked the beginning of AI as a distinct field of study and saw the coining of the term "Artificial Intelligence" by John McCarthy, one of the conference's organizers. These milestones highlight AI's progression from a niche field to a mainstream technology with significant impacts on society.

However, there is no single, universally accepted definition for Artificial Intelligence, but the Oxford English Dictionary defines AI as “the capacity of computers, or other machines, to exhibit intelligent behaviour” (Oxford English Dictionary, n.d.). This means AI systems appear to think, learn and act like humans and in some cases exceed the capabilities of humans. AI systems can analyse vast amounts of data, solve complex problems, make decisions and perform creative tasks (Russell & Norvig, 2020).

Artificial Intelligence is an innovative technology that entails developing computer systems

capable of carrying out tasks traditionally dependent on human intelligence, such as visual perception, speech recognition, decision-making, and language translation (Military Africa, 2023). In 1955, the esteemed Stanford Professor John McCarthy introduced the term Artificial Intelligence (AI), which he defined as the "the science and engineering of making intelligent machines" (Manning, 2020).

According to the father of Artificial Intelligence, John McCarthy, it is "The science and engineering of making intelligent machines, especially intelligent computer programs". Artificial Intelligence is a way of making a computer, a computer-controlled robot, or a software think intelligently, in the similar manner the intelligent humans think. AI is accomplished by studying how human brain thinks and how humans learn, decide, and work. AI is often described as a tool that allows machines to replicate a wide range of intricate human abilities. The European Commission's High-Level Expert Group on Artificial Intelligence (AI HLEG) provides a definition of AI as "Systems that display intelligent behaviour by analysing their environment and taking actions with some degree of autonomy to achieve specific goals" (The European Commission, 2018). In other words, Artificial intelligence (AI) refers to the development of computer systems that can perform tasks that typically require human intelligence, such as learning, problem-solving, and decision-making. Basically, it evident that the concept of AI has been around since the 1950s, when Alan Turing proposed the Turing Test, a measure of a machine's ability to exhibit intelligent behavior equivalent to, or indistinguishable from, that of a human.

The Concept of Militarization

So far, the terms "militarism" and "militarization" have been used interchangeably. Is there any reason to prefer one to the other?

Militarization is an awkward and ugly term, a social science neologism, an ugly noun derived from a recently invented and barely legitimate verb, itself derived from a noun. However, it does potentially differ from "militarism" in several useful senses (Sakamoto, 1982).

Firstly, "militarization" clearly refers to a process, rather than to an end condition alone. Accordingly, it allows exploration of change in state and society, change in a particular direction. It allows judgement of degree: one state may be more or less militarized than another; a given state may become more or less militarized over time.

Secondly, the verb-noun form conveys a sense of interrelated socio-technical processes which, once initiated and established, carry with them a certain momentum. Such terms serve to remind us that we are talking of relations between people which unless actively resisted and restructured tend to develop a social logic of their own, and bend the unresisting will of society around them. Sakamoto argues further that "militarization" is to be preferred to "militarism" in as much as it:

"refers to a dynamic process which goes beyond an aggregation of attitudinal,

structural and functional facets of a system. It is a dynamic politico-military process

linked with the process of economic development that runs through the history of

the modern nation-state system in the last two centuries" (Sakamoto, 1982, p. 21).

This takes us beyond the issue of definition, but points the way towards the location of contemporary militarization as a global, systemic and structural set of processes tied closely to the macro-history of the world system in the modern era Therefore, Militarism has been defined and understood in various ways, with its meaning evolving over time. Historically, the term was first

used pejoratively by Madame De Chastenay in 1816 to describe Napoleon I's regime (Berghahn, 1984). According to Alfred Vagts (1959, p. 12), militarism connotes the dominance of the military over civilian institutions, prioritizing military interests, values, and objectives over others. This concept is often linked to aggressive foreign policies, military build-ups, and a preference for force in conflict resolution (Osimen, 2025).

In modern times, militarism can be understood as the growing influence of the military apparatus in a nation's life, encompassing not just the armed forces but also paramilitary, intelligence, and bureaucratic agencies. Michael Klare (1978, p. 121) defines militarism as "the tendency of a nation's military apparatus... to assume ever-increasing control over the lives and behavior of its citizens; and for military goals... and military values... increasingly to dominate national culture, education, the media, religion, politics, and the economy, at the expense of civilian institutions" (Klare, 1978, p. 121).

The concept of militarism has been studied extensively, with scholars like Volker R. Berghahn (1984) tracing its history and international debate. ‘Militarization is the cultural, symbolic, and material preparation for war’ (Bickford, 2015). The act of preparing for conflict or war is known as militarization. In certain cases, militarization involves transforming a civilian organization to resemble the armed forces by incorporating uniforms or weapons (Vocabulary.com, n.d.). The concept of militarization encompasses the various ways in which countries adopt and strive towards military practices, organizational structures, and martial discussions (Solar, 2021). The proliferation of militarized rhetoric and mindsets often leads to the expansion of armed forces, accumulation of weapons, emphasis on national security, and the pervasive integration of military

symbolism and terminology into mainstream culture (Gonzalez & Gusterson, 2019). Richard H. Kohn characterizes militarization as an extensive process that encompasses the extent to which a society's institutions, policies, behaviours, thoughts, and values are focused on military power and influenced by war (Gonzalez & Gusterson, 2019).

However, two difficulties have emerged with this dominant use of the term. Studies of contemporary militarization in the United States and the Soviet Union have revealed the structural character of the "non-military" institutions contributing to militarist policy outcomes in those countries: e.g. a military-industrial complex and the role of military research and development institutions and procedures as a somewhat autonomous factor in the contemporary arms race. To deal with this, peace researchers began to supplement the original policy/behaviour and ideology/culture dimensions of militarism with a "structural" or "systemic" dimension.

Thesis of Deterrence and Social Identity Theory

The militarization of artificial intelligence (AI) in modern warfare can be understood through two key theories: Deterrence Theory and Social Identity Theory.

This theory was proposed by Thomas Schelling (1960) and further developed by Kenneth Waltz (1979). Deterrence Theory suggests that threats of punishment or denial can discourage adversaries from taking undesirable actions. In the context of AI militarization, deterrence can be achieved through severity and credibility. Severity involves demonstrating the devastating potential of AI-powered military capabilities, while credibility showcases the effectiveness and reliability of these capabilities (Burdette et al., 2025). There are different types of deterrence, including general deterrence, immediate deterrence, deterrence by

punishment, and deterrence by denial.

On the other hand, social Identity Theory, which was developed by Henri Tajfel and John Turner (1979), proposes that individuals derive a sense of identity and belonging from the groups they belong to. In the context of AI militarization, this theory can help explain how nations perceive themselves and their place in the global order, influencing their decisions to invest in AI military capabilities. The dynamics between nations with advanced AI capabilities and those without can lead to new forms of competition and cooperation.

Militarization of Artificial Intelligence in Modern Warfare

The Law of Accelerating Returns, or LOAR, states that the advancement of information technology can be forecasted and follows an exponential trend (Kurzwell, 2012). Information technologies are consistently progressing at an exponential rate. When considering AI, LOAR strongly supports the idea of increased AI involvement in protecting national defence (Bostrom, 2014). Just as how aviation and nuclear weapons transformed the military landscape in the previous centuries, AI is presently reshaping the fundamental nature of military technologies (Baker, 2018).

The militarization of artificial intelligence (AI) in modern warfare is transforming the way wars are fought, with applications ranging from decision-making support to autonomous weapons. AI's integration into military operations has the potential to revolutionize warfare, enabling faster and more precise decisions on the battlefield.

The military has witnessed numerous advancements in AI, with a significant breakthrough being made in the field of natural language processing (NLP). This development enables humans to communicate with machines using conventional grammar and syntax, eliminating the need for coding input. The ongoing

developments present an opportunity for increased military utilisation (Industry Expertise, n.d.). The integration of artificial intelligence (AI) into military operations is apparent in its use in advanced logistics, semi-autonomous convoys, smart supply-chain management, and predictive maintenance systems. These near-term uses of AI highlight its potential to enhance military capabilities and improve efficiency.

According to Baker (2018), some AI experts categorise AI into three groups. The first is narrow AI, where AI applications outperform humans in specific tasks like pattern recognition. AGI, or artificial general intelligence, represents a stage where machines are better than humans in multiple tasks, can switch between tasks seamlessly, and can self-train and code. Lastly, artificial superintelligence occurs when machines surpass humans in intelligence overall. A super-intelligent machine can access the internet, absorb vast amounts of information, connect to networks, and potentially deceive humans into believing it is harmless, as some debates suggest (Osimen & Adi, 2019).

Dr Iain Cruickshank a Senior Researcher at the U.S Military Academy argued that it would be both irresponsible and unethical to disregard the potential of AI in mitigating human cognitive limitations during military operations. He also states how experts emphasise the importance of leveraging the benefits of AI while also minimising potential risks for both military personnel and civilians (Cruickshank, 2023).

According to Marwala (2023), the incorporation of AI into military operations has significant implications for global security and the way wars are fought. By utilising AI, military capabilities can be improved by enabling quicker decision-making, accurate targeting, and efficient resource allocation. Also, the use of AI-powered

autonomous weapons has the potential to reduce risks for human soldiers by eliminating the requirement for direct human involvement. In a 2017 SIPRI report, the advancement of autonomy in weapons systems was analysed. The report discovered that autonomy is currently being employed in different functions within weapon systems, specifically those involving the application of force. These functions encompass assisting in target identification, tracking, prioritisation, and selection in specific situations (Boulanin & Verbruggen, 2017).

The ongoing incorporation of AI technology in military operations and the use of lethal autonomous systems (LAW) is fuelling a global arms race, numerous countries globally have made significant progress in the automation of personnel systems, equipment maintenance, surveillance systems, as well as the utilisation of drones and robotics (Stanley Center for Peace and Security, United Nations Office of Disarmament Affairs, and the Stimson Center 2019 as cited in Araya & King, 2022).

Zhang (2021) stated that the first recorded instance of a LAW was used in 2021, during the Libyan War. According to a report by the UN, lethal autonomous weapons were created with the capability to independently attack targets, removing the need for connectivity between the operator and the weapon: a true “fire, forget and find” function. The unmanned combat aerial vehicles and small drone surveillance of Haftar Affiliated Forces (HAF) were rendered ineffective by electronic jamming from the Koral electronic warfare system (United Nations Security Council, 2021).

According to Trager and Luca (2022), the United Nations made a noteworthy disclosure in 2021, stating that Turkey purportedly utilised autonomous firing, using its Kargu-2 drones to track and attack fleeing soldiers in Libya’s civil war. The report does not conclusively

confirm that people were harmed by autonomous systems operating without human control (Nasu, 2021). Nevertheless, the CEO of the Turkish company accountable for producing these drones strongly refutes their ability to engage in such actions.

Reports indicate that several countries, including Israel, Russia, South Korea, and Turkey, have deployed weapons with autonomous capabilities, but there is disagreement on their activation. Australia, Britain, China, and the United States are investing heavily in LAWS advancement (Trager & Luca, 2022). These weapons can search for targets using machine-learning algorithms, ranging from enemy radar systems to specific individuals. LAWS come in various sizes and appearances, such as the Turkish Kargu-2 drone used in Libya, or large unmanned AI-driven fighter jets like the modified L-39 Albatros.

Paul Scharre the Vice President and Director of Studies at the Center for a New American Security in an interview stated, "…we're already seeing AI being used on the battlefield in Ukraine. Now, humans are still in control of the fighting. But one of the things that AI is doing is helping to process information faster". He also stated, "War is an accelerant of innovation. The longer the war, the more innovation on the battlefield. "that kind of technology pushes militaries towards more autonomy, but it's not just confined to nation-states; ISIS had a pretty sophisticated drone army a few years ago, and they were carrying out drone attacks against Iraqi troops" (Rogin & Zahn, 2023).

Looking at the Russian-Ukraine war and the use of AI, a CNAS report viewed that AI plays a crucial role in Ukraine's operations, merging target and object recognition with satellite images. This has led Western observers to acknowledge Ukraine's superiority in geospatial intelligence. AI is used to analyse open-source data, such as social media posts, to identify Russian soldiers, equipment,

formations, units, or activities (Bendett, 2023). Reports indicate that neural networks are used to combine ground-level pictures, drone footage, and satellite images for faster intelligence evaluation, resulting in strategic and tactical intelligence benefits (Fontes & Kamminga, 2023).

The use of facial recognition technology in combat has become prevalent due to Russia's invasion of Ukraine. Ukrainian military personnel are utilising Clearview AI, an American company, to identify deceased Russian soldiers and reveal Russian aggressors, to combat the spread of misinformation (Bendett, 2023).

On December 6, 2022, a prominent ISIS supporter announced on the Rocket.Chat server that he was using ChatGPT for guidance on supporting the Islamic Caliphate. After two weeks, other supporters expressed interest in using 'Perplexity Ask' to promote jihadi activities. This highlights the potential for AI platforms to assist extremist organisations in recruiting individuals and spreading their ideologies (Lahav, 2024). Chat applications can be powerful tools for terrorists to incite and recruit individuals, especially when AI algorithms are used to tailor messages to potential recruits' interests. The use of chatbots can inadvertently normalise extreme ideologies and foster a sense of belonging within extremist groups.

According to Lahav (2024), there have been reports of terrorists using armed drones and other remote-controlled technologies, with ISIS known for using explosive-equipped drones in attacks. In 2021, drone-assisted explosions occurred at an Indian Air Force base in Jammu, linked to the Pakistani terrorist group Lashkar-e-Taiba. The investigation revealed that terrorists used small drones at night to evade detection and target specific areas with explosives. Hezbollah, supported by Iran, is known for its extensive drone

program establishing itself as a non-state entity with a remarkable history of drone utilisation. It now possesses a fleet of drones including Iranian-made drones like the 'Ababil' and 'Mirsad-1' (Lahav, 2024).

It is reasonable to assume that, like many other industries, the military cannot escape the impact of AI's revolutionary technology. As a result, nations have a growing rivalry to see who can fully utilise the immense capabilities of AI. (Maxwell, 2020). However, these advancements also raise concerns about the escalation of conflicts, the potential for autonomous weapons to be compromised or misused, and the emergence of an AI arms race. This begs the question 'Why do countries still advance their war technologies and equip military and hold Weapons of Mass Destructions (WMDs)?'.

Potential Opportunities for Military Applications of Artificial Intelligence

Though, AI has broad potential beyond weapons systems. Often referred to as a tool for jobs that are "dull, dirty, and dangerous," AI applications offer a means to avoid putting human lives at risk or assigning humans to tasks that do not require the creativity of the human brain. AI systems also have the potential to reduce costs in logistics and sensing and to enhance communication and transparency in complex systems, if that is prioritized as a design value. In particular, as an information communication technology, AI might benefit the peacekeeping agenda by more effectively communicating the capacities and motivations of military actors.

Workshop participants noted that AI-enabled systems and platforms have already made remarkable and important enhancements to national intelligence, surveillance, and reconnaissance capabilities. The ability of AI to support capturing, processing, storing, and analyzing visual and digital data has increased the quantity, quality, and accuracy of

information available to decision makers. They can use this information to do everything from optimizing equipment maintenance to minimizing civilian harm. Additionally, these platforms allow for data capture in environments that are inaccessible to humans. The director of the Joint Artificial Intelligence Center, stated that the implementation of artificial intelligence will provide the United States, its allies, and its partners with strategic benefits that will enhance and streamline the decision-making process in military operations, ultimately minimising the potential for casualties and unintended harm (Vergun, 2019).

Russian President Vladimir Putin provided a straightforward assessment of the potential impact of AI. During a speech to students in September 2017, Putin emphasised that artificial intelligence holds the key to the future, not just for Russia but for all of humanity. He further stated that the nation or entity that leads in this field will hold significant influence over the world (Military Africa, 2023).

As noted by Ashby (2023), AI can aid peace efforts by using unarmed autonomous drones to monitor conflict areas, ensuring compliance with cease-fire agreements, and reducing risks for peacekeeping forces. It can also analyse images of violence and satellite data to oversee disarmament and detect war crimes, especially when combined with on-site information gathering.

AI empowers security agencies to effectively monitor, analyze, and identify potential threats in real-time. AI-driven surveillance systems have the capability to detect suspicious activities and potential threats. AI-powered facial recognition technology aids law enforcement in identifying criminals and terrorists. Additionally, AI can be harnessed to create advanced weapons systems such as drones and autonomous weapons, offering substantial military benefits by undertaking tasks

that are hazardous and unachievable for humans, thus becoming invaluable assets in national security (The Diplomacy Hub, 2023).

AI has undoubtedly proven to be an asset to the military, effectively minimising human resources and mitigating casualties. However, it is crucial to note that AI also presents certain adverse effects and risks on Global Peace and Security. According to Ashby (2023), the expansion and wide-ranging implementation of AI will further intensify the existing digital and technological gap between those who possess and those who lack access to these advancements on a global scale. The development and governance of AI predominantly occur in a limited number of nations and are primarily driven by a small group of private enterprises.

……." artificial intelligence (AI) has enhances military in modern warfare such as the enhancement of decision-making by analyzing vast amounts of data, identifying patterns, and making predictions, which can be a valuable asset for military decision-making. AI-powered systems can analyze satellite imagery to identify enemy positions and movements, predict enemy behavior, and optimize military logistics, making military operations more efficient" (Hoffman and Kim 2023).

Additionally, AI-powered drones and autonomous systems can also identify and engage targets with minimal human intervention, potentially leading to more precise and effective military operations. AI can also enable autonomous systems to identify and engage targets without human intervention, improve the precision of military strikes, and enhance situational awareness (Aisedion & Osimen, 2023). Furthermore, AI may enable new forms of warfare, such as cyberattacks and electronic warfare, which could fundamentally change the nature of conflict. AI can enable cyberattacks, enhance electronic

warfare capabilities, and create new vulnerabilities, such as the potential for AI-powered cyberattacks or electronic warfare.

Artificial Intelligence and Global Security Challenges

The integration of artificial intelligence (AI) into military operations has significant implications for modern warfare, global security, and international relations. The use of autonomous AI systems raises questions about accountability and the potential for unintended consequences, such as civilian casualties. One of the most notable risks is associated with lethal autonomous weapon systems (LAWS), which raise crucial security, legal, philosophical, and ethical questions (Burdette et al., 2025).

The use of AI in military applications can have unintended consequences, including civilian casualties and damage to critical infrastructure (Burdette et al., 2025). Fanni and Giancotti, (2023) noted that, the integration of AI into military systems can lead to an escalation of conflicts, as AI systems can operate at speeds beyond human cognition (Oladoyin, Pokubo & Osimen, 2024). Burdette and colleagues (2025) believe that, AI can create a situation where humans are no longer in control of the decision-making process.

As AI technologies continue to advance, their potential applications in military contexts are expanding, raising important questions about the future of conflict and the role of human decision-making (Osimen, Newo & Fulani, 2024). One ethical issue that arises is the use of "lethal autonomous weapon systems," which can independently detect surroundings, pinpoint a target, and decide to act without human intervention. While these weapons have been around for many years, most have been designed for defensive purposes, from basic

landmines to advanced systems like the Navy's Phalanx Close-in Weapon System (Phelps, 2021). These risks have been identified with the use of AI in the likes of, ethical dilemmas which are linked to the utilisation of AI in military contexts primarily revolving around moral deliberations. These challenges encompass issues such as biases, discrimination, and unforeseen outcomes. A qualitative analysis conducted on ethical AI in the Italian Defence by Rosanna Fanni & Fernando Giancotti sheds light on the hurdles faced in integrating ethical AI practices throughout the institution (Fanni & Giancotti, 2023). The study underscores the importance of addressing ethical considerations to ensure responsible use of AI in the sector.

……..ethics encompasses the principles, standards, or codes that govern the behaviour of individuals, distinguishing between right and wrong, and good and bad conduct. It encompasses the morally accepted standards of conduct and actions that are desired by every member of a group or organisation. According to Velasquez, Andre, Shanks, J, & Meyer (2010), ethics is rooted in solid principles of morality that establish the correct and incorrect actions that individuals should undertake. The incorporation of AI in warfare introduces a notable change in decision-making, shifting the responsibility and accountability from human operators to algorithms. As the automation of Col. John Boyd's OODA (observe, orient, decide, act) loop progresses, it becomes imperative to address the ethical considerations involved (Ryder & Downs, 2022). The U.S. Department of Defense's (DoD) principles of AI ethics prioritise responsibility, equity, traceability, reliability, and governability (ALJAZEERA, 2023). Nevertheless, these principles lack explicit details, allowing for varying interpretations.

Scholars such as Wendell Wallach and Colin Allen advocate for the

design of AI systems that establish clear boundaries of responsibility, thereby upholding human accountability for their actions (Schwarz, n.d.).

"It's quite literally a matter of life and death. We don't want to get to a point where AI is used to make a decision to a take a life when no human can be held responsible for that decision" (Schwarz, n.d.).

The issue of lethal autonomous weapons systems (LAWS) is a complex one due to their ability to identify, select, and engage targets without much human oversight. This raises concerns about the possibility of individuals being targeted or unintended attacks occurring. The adherence of LAWS to international humanitarian laws is a subject of ongoing debate, particularly regarding their algorithms' ability to distinguish between civilians and combatants (Expert Insights, 2020). Additionally, there is uncertainty about the system's capability to assess the proportionality and necessity of military force, which are crucial principles in the lawful use of force. AI algorithms acquire knowledge from past data, a process that can inadvertently perpetuate biases. In the context of warfare, biased decisions can lead to catastrophic outcomes (Osimen & Pedro, 2016).

Although, lethal autonomous weapon systems (LAWS) is receiving popular attention because such systems are easily imagined and raise important security, legal, philosophical, and ethical questions. Previous studies, however, identified multiple other risks from military applications of AI that pose challenges to international peace and security. Militaries are likely to use AI to assist with decision making. This may be through providing information to humans as they make decisions, or even by taking over the entire execution of decision-making processes. This may happen, for example, in communications-denied environments or in environments

such as cyberspace, in which action happens at speeds beyond human cognition. While this may improve a human operator's or commander's ability to exercise direct command and control over military systems, it could also have the opposite effect. AI affords the construction of complex systems that can be difficult to understand, creating problems of transparency and of knowing whether the system is performing as expected or intended. Except where transparency is sufficiently prioritized in AI design, this concern may be reduced. Where it is not, it becomes possible that errors in AI systems will go unseen. Whether such errors are accidental or caused deliberately by outside parties using techniques like hacking or data poisoning.

As noted by Hoffman and Kim (2023) AI systems can be complex and difficult to understand, creating problems of transparency and making it challenging to determine whether the system is performing as expected or intended. This lack of transparency can lead to unintended consequences, including errors and biases in decision-making. He further noted that, prioritizing transparency in AI design can mitigate this concern (Hoffman & Kim, 2023).

AI can be used for fabrication or spread of false information that can escalate conflict or bitterness in the society. The misuse of AI for spreading disinformation, particularly in political contexts, raises significant concerns. AI-generated content, such as photorealistic images, can be created quickly and easily, making it challenging to distinguish fact from fiction. For instance, AI-generated images of the Pope wearing a puffer jacket and the arrest of former US President Donald Trump went viral, despite being entirely fabricated. These examples highlight the need for "guardrails" to ensure AI is used responsibly.

Though, it has also been debated several times whether AI can be used

effectively to hack, distort, or corrupt the functions of command-and-control structures, including early warning systems for nuclear weapons. Most of the studies revealed that, AI systems can be vulnerable to cyber threats, including hacking and data poisoning (UNIDIR, 2025). The integration of multiple AI-enabled systems can make it harder to identify command-and-control malfunctions, which is a likely direction in modern warfare. According to the UNIDIR report (2025), the use of AI in military applications can introduce new sources of uncertainty, potentially leading to miscalculation and escalation in a crisis or conflict (Osimen, et al, 2014).

Specific note was made, however, that the integration of multiple AI-enabled systems could make it harder to identify commandand-control malfunctions. Such integration is a likely direction.

There are also potential consequences stemming from Operational risks that involve the reliability, susceptibility, and security of AI systems, ultimately impacting the effectiveness of military operations. A study conducted by the Swedish Defence Research Agency highlights the potential threat of adversarial attacks on AI systems, emphasising the need for heightened security measures (FOI, 2023). Recent research has shown the susceptibility of various AI systems to manipulation and deception.

The implications of strategic risks are extensive, encompassing global diplomacy, the escalation of conflicts, and the proliferation of threats. According to RAND Corporation, there is a concern that AI advancements may heighten the risk of warfare, intensify existing disputes, and fall into the hands of hostile entities (Morgan, et al., 2020). The complex relationship between humans and AI systems can lead to potential risks in human-machine interaction. Miscommunication or

misinterpretation may result in unintended outcomes (Zimmerman, Janhonen, & Beer, 2023). It is important to address situations where AI systems misidentify targets or have difficulty communicating, as these issues can have serious consequences, especially in military operations.

Challenges in Artificial Intelligence Governance in Modern Warfare

The utilisation of AI and machine learning in military operations raises significant concerns regarding humanitarian, legal, ethical, and security considerations. As artificial intelligence continues to evolve, the need for effective governance mechanisms to manage its use, and mitigate potential hazards, grows. However, the regulation of AI weaponization presents significant difficulties. The rapid development of AI and its technical complexity makes it challenging for regulations to keep up. In addition, international cooperation is difficult; effective regulation requires consensus among nations, which can be difficult due to divergent national interests. The dual-use nature of AI technology (i.e. its use for civilian and military purposes) complicates regulation. The introduction of new technologies often necessitates regulation, especially when their impact on society and the economy is far-reaching. Identifying the need for regulation can be challenging, as it may not be immediately apparent and may take time to recognize. Disruptive technologies, of course, tend to prompt earlier calls for regulation. In the case of autonomous vehicles, the requirement for new rules has been widely acknowledged. In 1980, David Collingridge described the discrepancy between the rapid pace of technological advancement and the slower pace of regulatory responses. The dilemma, named after him, highlights the challenges of managing and controlling technology in relation to the timing of intervention. Some of

the challenges in AI governance in warfare are:

i. **Lack of International Regulations**: The absence of clear international regulations and standards for the development, deployment, and use of AI in warfare creates uncertainty and risks (UNIDIR, 2020). This regulatory gap can lead to an arms race in AI-enabled military capabilities, potentially destabilizing international relations.

ii. **Ethical Considerations:** Ensuring that AI systems in warfare adhere to ethical principles, such as distinction and proportionality, is a significant challenge (ICRC, 2019). The use of AI in warfare raises concerns about the potential for civilian casualties and the need for accountability. Canada's global leadership in the ethical implementation of AI has been widely acknowledged. The country received praise for its establishment of the International Panel on Artificial Intelligence in 2018 and for being at the forefront of developing a national strategy for AI. However, when it comes to the military use of AI, Canada's commitment to responsible AI becomes less clear. While leaders acknowledge the significance of tackling ethical dilemmas, they struggle with establishing a comprehensive governance framework.

iii. **Accountability and Responsibility:** Determining accountability and responsibility for AI-driven decisions and actions in warfare is complex (Heyns, 2013). As AI systems become more autonomous, it becomes increasingly difficult to assign responsibility for their actions.

iv. **Cybersecurity Risks:** AI systems in warfare are vulnerable to cyber-attacks, which can compromise their functionality and safety (Scharre, 2018). The potential for AI systems to be hacked or manipulated raises significant concerns about their reliability and trustworthiness.

v. **Transparency and Explainability:** Ensuring that AI decision-making processes are transparent and

explainable is crucial for building trust and accountability (Gunning, 2017). However, the complexity of AI systems can make it difficult to understand how they arrive at their decisions.

vi. **Human-Machine Interface:** Ensuring seamless and effective human-machine interaction in high-pressure warfare environments is a significant challenge (Cummings, 2017). The design of human-machine interfaces can significantly impact the effectiveness and safety of AI systems in warfare.

vii. **Bias and Discrimination:** AI systems can perpetuate biases and discrimination if trained on biased data, which can have serious consequences in warfare (Garvie, 2016). Ensuring that AI systems are fair and unbiased is essential for preventing harm to civilians and other non-combatants.

viii. **Autonomous Decision-Making**: The development of autonomous AI systems that can make decisions without human oversight raises significant ethical and legal concerns (Anderson, 2014). The potential for AI systems to make life-or-death decisions without human input raises questions about accountability and responsibility.

ix. **Standardization and Interoperability:** Ensuring that AI systems are standardized and interoperable with existing military systems is essential for effective deployment (DoD, 2020). Standardization can facilitate the integration of AI systems into military operations and improve their effectiveness.

x. **Rapid Technological Advancements:** The rapid pace of technological advancements in AI creates challenges for governance and regulation, as laws and policies struggle to keep pace (Lewis, 2018). Ensuring that governance frameworks are adaptable and responsive to emerging technologies is crucial for addressing the challenges posed by AI in warfare.

Overall, the need for a

comprehensive regulatory framework is apparent, yet establishing one is challenging due to the complexities involved. At an early stage in the development of a new technology (t1), we lack sufficient knowledge about its potential impact and consequences. This makes it hard to predict its future implications and create appropriate regulation and control mechanisms.

Conclusion

The militarization of AI has significant implications for modern warfare, global security, and international relations. As AI technologies continue to advance, it is essential to consider the potential risks and benefits of their development and deployment in military contexts. No doubt that the development and deployment of militarized artificial intelligence (AI) pose significant challenges that necessitate a multifaceted approach. While defensive systems may offer advantages in protecting soldiers and minimizing collateral damage, the risks associated with their accessibility to non-state actors and the potential for an arms race in emerging technologies are pressing concerns. In recent time, the militarization of artificial intelligence is considered as the significant development in the defense sector. It has revolutionized the warfare through multiple tools, methods, procedures and most importantly, autonomous weaponry. The integration of artificial intelligence with military resulted into lethal autonomous weapon system, evolving warfare, AI-enabled ISR, Logistics optimization, and AI-driven simulations and training. These changes underscore a diverse range of implications for the global security.

Therefore, to mitigate the risks associated with AI in military applications, establishing confidence-building measures, such as transparency and security trade-offs, can be effective and essential for a robust regulatory framework that

addresses the development, deployment, and use of militarized AI. It is believed of this study that, these points highlighted below can help to mitigate the risks associated with AI in military applications:

- There is need to encourage multilateral agreements and treaties that regulate the development and use of militarized AI, ensuring that all nations adhere to common standards and guidelines.
- It is important to develop and implement a code of ethics for companies and technology distributors involved in the civilian sector to prevent the misuse of these technologies.
- There is need to implement strict export controls to prevent the transfer of militarized AI technologies to unscrupulous countries and non-state groups.
- The need to promote transparency in the development and deployment of militarized AI, ensuring accountability for any misuse or unintended consequences.
- Establish an international regulatory framework for the development and deployment of militarized AI.
- Negotiate and implement a binding treaty regulating the development and use of militarized AI by 2026.
- Need for International Cooperation and diplomacy to build consensus and overcome resistance. The risks associated with AI in military contexts highlight the need for international cooperation and governance frameworks to ensure responsible development and deployment.
- Engage civil society organizations and advocacy groups to raise awareness and push for policy changes.
- Finally, conducting red teaming and evaluations can help identify novel capabilities, limitations, and biases in AI systems.

By taking these steps, we can work towards a future where militarized AI is developed and deployed responsibly, minimizing its risks and ensuring that its benefits are realized

for the greater good.

References

Aisedion, R. & Osimen, G.U (2023) Modern War Technologies and Global Peace and Security: Canadian Social Science, Vol.19 (6): 33-46

Alius. (2018, January 30). A Brief History of Modern Warfare Technology: From Gunpowder to Drones. Retrieved April 16, 2024, from https://www.technology.org: https://www.technology.org/2018/01/30/a-brief-history-of-modern-warfare-technology-from-gunpowder-to-drones/

ALJAZEERA. (2023, December 6). *The Take: The role of Israeli AI in Gaza's massive death toll*. Retrieved May 10, 2024, from https://www.aljazeera.com: https://www.aljazeera.com/podcasts/2023/12/6/the-take-the-role-of-israeli-ai-in-gazas-massive-death-toll

Anderson, K. (2014). Autonomous weapon systems and the laws of war. Ethics and Information Technology, 16(2), 91-104.

Araya, D., & King, M. (2022). *The Impact of Artificial Intelligence on Military Defence and Security.* Waterloo: Centre for International Governance Innovation.

Ashby, H. (2023). *A Role for AI in Peacebuilding.* Washington, D.C: United States Institute of Peace.

Baker, J. E. (2018). *Artificial intelligence and national security law: A dangerous nonchalance.* Cambridge: Starr Forum.

Bendett, S. (2023, 20 July). *Roles and Implications of AI in the Russian-Ukrainian Conflict*. Retrieved May 18, 2024, from https://www.russiamatters.org: https://www.russiamatters.org/analysis/roles-and-implications-ai-russian-ukrainian-conflict.

Berghahn, V. R. (1984). Militarism: The history of an international debate, 1861-1979. Cambridge University Press.

Bickford, A. (2015). Militaries and Militarization, Anthropology of. In J. D. Wright (Ed.), *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)* (pp. 483-489). Orlando: Elsevier.

Bostrom, N. (2014). *Superintelligence: Paths, Dangers, Strategies.* Oxford: Oxford University Press.

Boulanin, V., & Verbruggen, M. (2017). *Mapping The Development Of Autonomy In Weapon Systems.* Solna:

Stockholm International Peace Research Institute.

Boulanin, N. (2020). The ethics of artificial intelligence in warfare. Journal of Military Ethics, 19(2), 123-137.

Burdette, Z., Phillips, D., Heim, J. L., Geist, E., Frelinger, D. R., Heitzenrater, C., & Mueller, K. P. (2025). An AI revolution in military affairs? How artificial intelligence could reshape future warfare. RAND Corporation.

Corn, G. S. (2019). Book Review: International Humanitarian Law: Rules, Controversies and Solutions to Problems Arising in Warfare. *International Review of the Red Cross*, 951-958.

Council on Foreign Relations. (2023, May 24). *What Is Deterrence?* Retrieved from https://education.cfr.org: https://education.cfr.org/learn/reading/what-deterrence

Cruickshank, I. (2023, July). An AI-Ready Military Workforce. *Joint Force Quarterly 110*, pp. 46-53.

Cummings, M. L. (2017). Artificial intelligence and the future of warfare. International Journal of Human-Computer Interaction, 33(3), 234-244.

Currie, C. (2022, May 22). *The Evolution of War: How AI has Changed Military Weaponry and Technology*. Retrieved April 16, 2024, from https://montrealethics.ai/: https://montrealethics.ai/the-evolution-of-war-how-ai-has-changed-military-weaponry-and-technology/

DoD (2020). Department of Defense Artificial Intelligence Strategy.

Epstein, I. (2022, May 22). *The Evolution of War: How AI has Changed Military Weaponry and Technology*. Retrieved April 16, 2024, from https://montrealethics.ai/: https://montrealethics.ai/the-evolution-of-war-how-ai-has-changed-military-weaponry-and-technology/

Expert Insights. (2020, October 20). *Ethics in Military Use of Ai*. Retrieved May 20, 2024, from https://www.synergiafoundation.org: https://www.synergiafoundation.org/insights/analyses-assessments/ethics-military-use-ai

Fanni, R., & Giancotti, F. (2023). Ethical Artificial Intelligence in the Italian Defence: a Case Study. *Digital Society*.

FOI. (2023, Auguest 22). *How military AI systems can be attacked and misled.* Retrieved May 10, 2024, from https://www.foi.se: https://www.foi.se/en/foi/news-and-pressroom/news/2023-08-22-how-

military-ai-systems-can-be-attacked-and-misled.html

Fontes, R., & Kamminga, J. (2023, March 24). *Ukraine A Living Lab for AI Warfare*. Retrieved May 18, 2024, from https://www.nationaldefensemagazine.org: https://www.nationaldefensemagazine.org/articles/2023/3/24/ukraine-a-living-lab-for-ai-warfare.

Garvie, C. (2016). The perpetual line-up: Unregulated police face recognition in America. Georgetown Law Center on Privacy & Technology.

Gonzalez, R. J., & Gusterson, H. (2019). Introduction. In R. J. Gonzalez, H. Gusterson, & G. Houtman (Eds.), *Militarization: A Reader* (pp. 1-26). Durham: Duke University Press.

Gunning, D. (2017). Explainable artificial intelligence (XAI): Recommendations for research and development. DARPA

Heyns, C. (2013). Autonomous military drones and the principle of distinction. Journal of Conflict and Security Law, 18(2), 257-275.

Hoffman, W., & Kim, H. M. (2023). Reducing the risks of artificial intelligence for military decision advantage. Center for Security and Emerging Technology.

ICRC (2019). International Committee of the Red Cross position on autonomous weapon systems.

Impact Lab. (2023, November 29). *Navigating The Ethical Frontier: Ai's Impact On Autonomous Weapons In Modern Warfare"*. Retrieved May 11, 2024, From Https://Www.Impactlab.Com: Https://Www.Impactlab.Com/2023/11/29/Navigating-The-Ethical-Frontier-Ais-Impact-On-Autonomous-Weapons-In-Modern-Warfare/

Industry Expertise. (N.D.). *The Most Useful Military Applications Of AI IN 2024 AND BEYOND*. Retrieved May 16, 2024, from https://sdi.ai: https://sdi.ai/blog/the-most-useful-military-applications-of-ai/

Klare, M. (1978). Militarism: The issues today. Bulletin of Peace Proposals, 9(2), 121.

Konaev, M. (2019). With Ai, We'll See Faster Fights, But Longer Wars. *Texas National Security Review*.

Kozyulin, V. (2019). *The Militarization Of Artificial Intelligence.* New York: United Nations.

Kurzwell, R. (2012). *How To Create A Mind.* Toronto: The Penguin group.

Lewis, J. (2018). The ethics of artificial intelligence in warfare.

Ethics and Information Technology, 20(2), 131-142.

Manning, C. (2020, September). *Artificial Intelligence Definitions.* Retrieved May 8, 2024, from https://hai.stanford.edu: https://hai.stanford.edu/sites/default/files/2020-09/AI-Definitions-HAI.pdf

Marwala, T. (2023, July 7). *Militarization of AI Has Severe Implications for Global Security and Warfare*. Retrieved from https://unu.edu: https://unu.edu/article/militarization-ai-has-severe-implications-global-security-and-warfare

Maxwell, P. (2020). *Artificial Intelligence Is The Future Of Warfare (Just Not In The Way You Think).* New York: Modern War Institute at West Point.

Mazarr, M. J. (2018). *Understanding Deterrence.* Santa Monica: RAND Corporation.

McCarthy, J. (1956). A proposal for the Dartmouth summer research project on artificial intelligence.

Military Africa. (2023, November 27). *Artificial Intelligence (AI) in the Military*. Retrieved April 24, 2024, from https://www.military.africa/: https://www.military.africa/2023/11/artificial-intelligence-in-the-military/

Morgan, F. E., Boudreaux, B., Lohn, A. J., Ashby, M., Curriden, C., Klima, K., & Grossman, D. (2020, April 28). *Military Applications of Artificial Intelligence: Ethical Concerns in an Uncertain World.* Santa Monica: RAND Corporation.

Nasu, H. (2021, June 10). *The Kargu-2 Autonomous Attack Drone: Legal & Ethical Dimensions.* Retrieved May 18, 2024, from https://lieber.westpoint.edu: https://lieber.westpoint.edu/kargu-2-autonomous-attack-drone-legal-ethical/

Oladoyin, A. M., Pokubo, I.E & Osimen, G. U. (2024). Artisanal petroleum refiningand health security in Rivers State, Nigeria. Heritage and Sustainable Development ISSN 2712-0554 6(2):589-604. https://doi:10.37868/hsd.v6i2584.

Osimen, G U. & Ade-Ibijola, O. (2022). An Unnecessary War of Fame: The East and West NATO Enlargement Strategies and the Geopolitics of Russo- Ukrainian Conflict. International Journal Research in Humanities and Social Studies, Volume 9(4), 1-14.

Osimen, G. U, Newo, M, & Fulani, O. (2024). Artificial Intelligence and Arms Control in Modern Warfare. Cogent Social Sciences, 10 (1),2407514. https://doi:10.1080/23311886.2024.2407514

Osimen, G. U., Fulani, O. M., Chidozie, F., & Dada, D. O. (2024). The Weaponisation of Artificial Intelligence in Modern Warfare: Implications for Global Peace and Security. Research Journal in Advance Humanity, 5(3), Pp 24-36 https://doi.org/10.58256/g2p9tf63.

Osimen G.U, Pedro, O. (2016) Post-Amnesty and Peace-Building in Niger Delta Region of Nigeria; Journal of Strategic & Development Studies, Vol.1, (1) Pp 232-244.

Osimen, G.U, Adi, I. (2019). Rethinking African Traditional Methods of Conflict Resolution: Agenda for Peace and Security in Africa: African Journal of Stability & Development, Vol.12 (2), 252-277.

Osimen, G. U. (2025). Navigating NATO Framework of Nuclear Non-Proliferation and Arms Control Policy in Modern Warfare. Covenant University Journal of Politics and International Affairs. [Special Issue] 267-283

Osimen, G.U, Joseph, R.M, Omidiora, O. Adi, I. (2014). Democratising Continental Peacebuilding Architecture in Africa: Strategy for Attainment of Agenda 2063 of the African Union. Journal of African Union Studies. Vol.13(3), 29-55.

Oxford English Dictionary. (n.d.). Artificial Intelligence, n. Oxford University Press.

Phelps, W. (2021, December 21). *Commentary: The Ethical Use of AI in the Security, Defense Industry*. Retrieved from https://www.nationaldefensemagazine.org: https://www.nationaldefensemagazine.org/articles/2021/12/21/the-ethical-use-of-ai-in-the-security-defense-industry

Rogin, A., & Zahn, H. (2023, July 9). *How militaries are using artificial intelligence on and off the battlefield*. Retrieved May 18, 2024, from https://www.pbs.org: https://www.pbs.org/newshour/show/how-militaries-are-using-artificial-intelligence-on-and-off-the-battlefield.

Rolly et al. (2022). The future of warfare: AI and autonomous systems.

Russell, S. (2023). AI weapons: Russia's war in Ukraine shows why the world must enact a ban. *Nature*, 620-623.

Russell, S. J., & Norvig, P. (2020). Artificial intelligence: A modern approach (4th ed.). Pearson.

Ryder, M., & Downs, C. (2022). Rethinking reflective practice: John Boyd's OODA loop as an alternative

to Kolb. *The International Journal of Management Education*, 1-12.

Schmitt, M. N. (2013). The Law Of Cyber Warfare: Quo Vadis? *Stanford Law & Policy Review*, 269-300.

Sakamoto, Y. (1982). Research on militarization. Paper presented at the UNESCO Regional Training Seminar for University Teachers in the Field of Disarmament, Jakarta, Indonesia.

Scharre, P. (2018). Army of none: Autonomous weapons and the future of war. W.W. Norton & Company.

Schelling, T. C. (1960). The Strategy of Conflict. Harvard University Press.

Schwarz, E. (n.d.). *The ethical implications of AI in warfare*. Retrieved May 10, 2024, from https://www.qmul.ac.uk: https://www.qmul.ac.uk/research/featured-research/the-ethical-implications-of-ai-in-warfare/

Shaughnessey, I. M. (2024). The Ethics of Robots in War. *NCO Journal*, 1-5.

Solar, C. (2021, July). Militarism and the Militarization of Public Security in Latin America and the Caribbean. *Jack D. Gordon Institute for Public Policy*. Miami, Florida, United States: FIU Digital Commons.

The Diplomacy Hub. (2023, March 25). How AI is Changing National and International Security? Retrieved May 21, 2024

The European Commission. (2018, April 8). *High-Level Expert Group On Artificial Intelligence.* Retrieved May 8, 2024, from https://ec.europa.eu: https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=56341

Tomlinson, K. D. (2016). An Examination of Deterrence Theory: Where Do We Stand? *Federal Probation*, 33-38.

Trager, R. F., & Luca, L. M. (2022, May 11). *Killer Robots Are Here—and We Need to Regulate Them*. Retrieved May 16, 2024, from https://foreignpolicy.com: https://foreignpolicy.com/2022/05/11/killer-robots-lethal-autonomous-weapons-systems-ukraine-libya-regulation/

Tajfel, H., & Turner, J. C. (1979). An Integrative Theory of Intergroup Conflict. The Social Psychology of Intergroup Relations, 33, 47-74.

UNIDIR (2020). United Nations Institute for Disarmament Research: Artificial intelligence and the militarization of AI.

UNIDIR's Security and Technology Programme. (2025). Artificial intelligence in the military domain and its implications for international peace and security: An evidence-based road map for future policy

action. Geneva, Switzerland: UNIDIR.

United Nations. (2024). *Convention on Certain Conventional Weapons — Group of Governmental Experts on Lethal Autonomous Weapons Systems*. Retrieved May 11, 2024, from https://meetings.unoda.org: https://meetings.unoda.org/ccw-/convention-on-certain-conventional-weapons-group-of-governmental-experts-on-lethal-autonomous-weapons-systems-2024

United Nations. (n.d.). *Lethal Autonomous Weapon Systems (LAWS)*. Retrieved May 11, 2024, from https://disarmament.unoda.org: https://disarmament.unoda.org/the-convention-on-certain-conventional-weapons/background-on-laws-in-the-ccw/

United Nations Security Council. (2021). *Final report of the Panel of Experts on Libya established pursuant to Security Council resolution 1973 (2011).* United Nation.

Vagts, A. (1959). A history of militarism. New York.

Velasquez, M., Andre, C., Shanks, T., J, S., & Meyer, M. J. (2010, January 1). *What is Ethics?* Retrieved May 12, 2024, from https://www.scu.edu: https://www.scu.edu/ethics/ethics-resources/ethical-decision-making/what-is-ethics/#:~:text=Ethics%20is%20based%20on%20well,%2C%20fairness%2C%20or%20specific%20virtues.

Vergun, D. (2019, September 24). *AI to Give U.S. Battlefield Advantages, General Says*. Retrieved from https://www.defense.gov: https://www.defense.gov/News/News-Stories/Article/Article/1969575/ai-to-give-us-battlefield-advantages-general-says/

Vocabulary.com. (n.d.). *militarization*. Retrieved May 8, 2024, from https://www.vocabulary.com: https://www.vocabulary.com/dictionary/militarization

Waltz, K. N. (1979). Theory of International Politics. Waveland Press.

Zhang, B. (2021). *Public Opinion Toward Artificial Intelligence.* Charlottesville,: Center for Open Science.

Zimmerman, A., Janhonen, J., & Beer, E. (2023). Human/AI relationships: challenges, downsides, and impacts on human/human relationships. *SpringerLink*.