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The weaponisation of artificial intelligence in modern warfare: Implications for global peace and security


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Abstract

The integration of Artificial Intelligence (AI) into military operations has significant implications for global stability. Understanding these implications is crucial for policymakers, researchers, and the international community. This study addresses the impact of AI-driven technologies on defence systems. It examines autonomous weapons, surveillance, and cyber warfare, highlighting the potential for an arms race. The main argument is that responsible AI deployment is essential for maintaining peace and security. The study is anchored on Deterrence theory. This study adopts qualitative research methods as a means of data collection which is secondary source based, and were merely obtained from textbooks, Journal articles, conference proceedings, Newspapers, and reliable internet materials. The data collected were analysed thematically. The study however revealed that AI enhances military capabilities while raising legal and ethical concerns. The study therefore recommends among others, the need for AI governance via international norms, and cooperation to prevent misuse.

Keywords: Artificial Intelligence (AI), defence, global peace and security, warfare, weaponisation



Public Interest Statement

The advent of Artificial Intelligence in military operations marks a transformative era in defense mechanisms, with profound implications for global security. This study illuminates the pivotal role of AI in modern warfare, from autonomous weaponry to cyber defense. The findings of this research are crucial for informed decision-making and the establishment of international norms, contributing to a body of literature in AI-driven weapons for a safer, secured and peaceful society.

Introduction

The idea of Artificial Intelligence being humanoid robots with complete consciousness is a common misconception that is often associated with science fiction. However, there is more to this; as defined by Copeland (2024), AI can be seen as machines or robots controlled by computers that can carry out tasks demanding intelligence at a level comparable to humans; believed to have the ability to think, comprehend, and acquire knowledge from past encounters. Artificial intelligence (AI) has rapidly emerged as an essential component of our everyday lives, exerting its influence across a wide range of sectors including healthcare, education, finance, and entertainment (Marwala, 2023; Adom, Kportufe, Asare-Aboagye, & Kquofi, 2024). Artificial Intelligence (AI) has as well become an integral part of modern warfare, revolutionising the way conflicts are conducted; examples of AI applications in military contexts include autonomous weapons systems, which can operate without direct human control to identify and engage targets (Military Africa, 2023). It is also employed in cybersecurity, where it helps to detect and counteract cyber threats more efficiently. In logistics and transportation, it streamlines supply chain management, ensuring that troops and equipment are transported effectively.

AI is also utilised in combat simulation and training, providing realistic scenarios for soldiers to train in a safe environment. AI's role extends to battlefield healthcare as well, where it assists in medical diagnosis and treatment in combat zones (Marwala, 2023). Contributing to threat monitoring and situational awareness, offering real-time data analysis to inform strategic decisions (Chukwudi, Gberevbie, Abasilim & Imhonopi, 2019).

Tracing back the innovation of Artificial Intelligence; in a study by Anyoha (2017), it was argued that the origination of AI can be traced back to the 1950s by a mathematician, Alan Turing, where he said, "humans use available information as well as reason in order to solve problems and make decisions, so why can't machines do the same thing?"

War has typically been seen as a direct and violent conflict. Advancements in military technology has changed the traditional concept of war. This change has expanded the definition of war to include more passive tactics (Daudu, Osimen, & Shuaibu, 2023). 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).

Technological advancements in warfare can be traced to the discovery of gunpowder in medieval China; 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. Over time, 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).

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 utilised to create more potent weapons, but its use quickly expanded to include mechanised 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. 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 (Osimen, Daudu, & Awogu-Maduagwu, 2023).

Study by Saidi (2022), sort to bring understanding on the benefit and challenges of integrating meaningful human control in the utilisation of autonomous weapons systems. Study by Dresp-Langley (2023), focused on pushing forth awareness in the public domain about the possible threats of Automated Weapon Systems (AWS). While the study by Seamus (2020), only focused on how AI's application in modern warfare have revolutionised national security power dynamics between US, China, Russia and the Private Industry, limiting the study to those areas.

Therefore, this study aims to shed light on the complex relationship between Artificial Intelligence (AI) and military operations, a connection that has the capacity to redefine global security frameworks. By analysing the various implications of AI integration in the military, it will investigate how advanced technologies enhance defence capabilities, ranging from autonomous weapons to surveillance systems.

Furthermore, the study will explore the potential of AI as a unifying influence, utilising advanced analytics and support for peacekeeping to avert escalation and promote collaboration. Navigating through this unfamiliar territory, our plea for action remains clear: achieve a subtle equilibrium that harnesses the benefits of AI for national security while preserving worldwide stability and upholding the values of compassion.

This study adopts qualitative research methods in the source for information which are secondary data. The sourced information is obtained from textbooks, Journals and conference publications, Newspapers, Magazines, and reliable internet materials. the data collected were analysed thematically.

Conceptual Issues

The Concept of Artificial Intelligence

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).

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).

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.

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).

study's defect is that it focused more on an Army perspective but concluded that the military must work towards creating an AI-enabled workforce.

According to Marwala (2023), the incorporation of AI into military operations has significant implications for global security and the way wars are fought. He/she argued that 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. This study deduced that it is necessary to have an adaptive and evolving regulatory framework rather than a static regulatory approach.

It is showed through the studies reviewed above that they support the use of AI and how it has been a means to reduce human risks during war, as the supposed AI goes to battle for military but there have been cases whereby there have been misusing of AI especially by terrorist as stated below.

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).

The Concept of Weaponisation

According to Cambridge Dictionary, Weaponisation is defined as the process of converting substances like bacteria, toxic chemicals, etc. into tools of harm capable of causing fatalities or harm to numerous individuals, or the act of storing weapons in a specific location (Cambridge Dictionary, n.d.). The weaponisation process has been extensively examined in multiple security-related disciplines, with particular emphasis on the weaponisation of nuclear materials and programs.

There have also been documented concerns about the weaponisation of toxins, biological and chemical agents, as well as the examination of weather and climate manipulation within the realm of weaponisation (Pincus, 2017).

Study carried out by Buchta (2008), examined the space weaponisation and relations between Canada and United States (US). He/she stated that ongoing technological progress and the persistent military status quo consistently drive nations to employ space for strategic objectives. Went on to say, commercial satellite imagery has been instrumental and will continue to play a crucial role in enhancing sensor capabilities for peacekeeping efforts. United Nations missions, such as the Rwanda Refugee Exodus Situation in 1996 and Kosovo in 1999, have made use of commercial satellite imagery (Huebert 2004, 41 as cited in Buchta, 2008). Looking at their past, present and future, the study concluded that by implementing new strategies in Canada and the U.S., it can increase the chances of continued collaboration between middle and major powers in space weaponisation.

According to Joshi (2019), he explained that victories in battle throughout human history have been the one with the ability to fight from afar in the battlefield. He further stated that,

“Teeth and claws were defeated by knives and swords. Swords were defeated by arrows. Arrows couldn’t hold up against guns. Guns were defeated by guns and cannons that could shoot accurately from further away. These were then trumped by aircraft that could kill from the sky, out of sight.”

Joshi’s analysis highlights the importance of long-range capabilities in weaponry throughout history. Advancements in weaponry have continually shifted power dynamics, from primitive tools to more sophisticated weapons like guns and aircraft. Distance and accuracy have played a crucial role in determining success in combat.

A study published in PLOS ONE in 2021 supports this view, highlighting that the evolution of military technologies in pre-industrial societies was driven by factors such as world population size, connectivity between regions, and significant technological innovations like iron metallurgy and horse riding (Turchin, Hoyer, Korotayev, Kradin, Nefedov, Feinman, et al., 2021). These advancements facilitated the development of more sophisticated weaponry and combat methods, enabling forces to strike from afar and with greater precision.

The transition from melee weapons to ranged weaponry has indeed been a pivotal shift in military engagements. As technology advanced, so did the ability to project power over greater distances, culminating in the development of aircraft and other long-range platforms that revolutionised warfare. This trajectory of military technology development underscores the importance of innovation and adaptation in military doctrine and strategy.

Weaponisation 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 (Kurzweil, 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 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.

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 (Boulain & Verbruggen, 2017).

The swift advancements in technology have led to the emergence of both symmetrical and asymmetrical weapons on the battlefield, including a wide range of unmanned vehicles that operate on land, in the air, and at sea. Advanced weaponry, like unmanned drones, utilise intelligent precision to accurately target specific objectives, rather than causing indiscriminate casualties (Aisedion & Osimen, 2023).

The ongoing incorporation of AI technology in military operations and the use of lethal autonomous systems (LAW) is definitely 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).

A study by Seamus (2020), focusing on the following countries as earlier stated, United States, China and Russia, he stated that, presently, within this trio of nations, there is a continuous competition to create the most advanced AI technology and concluded that AI arms race will surely persist.

Zhang (2021) opined 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 Albatross. Currently, Artificial Intelligence (AI) stands as the United States’ most formidable asset for defence (Karl & Lyric, 2019 as cited in Seamus, 2020).

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. So, the longer war goes on, 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).

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)?’.

The Thesis of Deterrence Theory

The theory of deterrence originates from classical theory, which was explained by three influential philosophers: Hobbes (1651), Beccaria (1764), and Bentham (1789). These philosophers believed that people are rational and consider the advantages and disadvantages before committing crimes. They also argued that severe, predictable, and immediate punishment acts as a deterrent to prevent illegal actions (Tomlinson, 2016).

Deterrence is a unique form of social interaction where one party seeks to guide the actions of another party towards a desired outcome. It involves deterring State from engaging in actions deemed unfavourable by State B through the use of threats to impose consequences. Deterrence aims to prevent undesirable behaviours, like military assaults, by dissuading individuals or entities. It contrasts with ‘compellence’, which involves forcing a specific course of action (Mazarr, 2018).

During the final stages of the Cold War, the United States successfully developed an intercontinental ballistic missile system known as the “Peacekeeper” (Council on Foreign Relations, 2023). This advanced arsenal could launch ten nuclear warheads accurately over seven thousand miles. Despite the paradoxical nature of the name, the United States believed that the devastating capabilities of these missiles could serve as a deterrent to aggression and promote peace by discouraging hostile activities, particularly from the Soviet Union.

To ensure effective deterrence, two key factors are necessary: Severity and Credibility.

- **Severity:** Severity involves presenting an opponent with overwhelming retaliation, achieved through economic sanctions, diplomatic isolation, or military action. During the Cold War, nuclear weapons served as the ultimate deterrent (Council on Foreign Relations, 2023). This can also be referred to Deterrence by Punishment.
- **Credibility:** Credibility involves convincing an opponent that aggression will provoke a strong response, demonstrated through weapons tests, increased military presence, and public announcements. Both the US and the Soviet Union established credibility by taking military action and constructing specialised weapons systems. This concept is known as mutually assured destruction (Council on Foreign Relations, 2023). This can also be referred to as Deterrence by Denial.

Applying this theory to the study, the theory of Deterrence stands a valuable lens through which we can understand or breakdown the implications of the use of AI for Global peace and security. The theory states that people view their best and worst options before carrying out an act. Deterrence by denial stands as a critical pillar in maintaining global peace. By fortifying defences, shaping adversary perceptions, and emphasizing resilience, nations can effectively dissuade aggression. The calculated risks and consequences associated with military actions act as powerful deterrents, ensuring that peace prevails even in a world where tensions persist. By integrating this theory, it will provide a holistic perspective that can guide abstaining from engaging in an act of war by nations.

The Implications of AI on Global Peace and Security

According to Albert Einstein, Peace is not just the absence of war but also the presence of Justice, Law and order and in short of government in the society (Einstein, 1988). Johan Galtung, the father of peace argued that peace and conflict are linked. He states that peace is either Positive (presence of a desirable state of mind) or Negative (Peace of graveyard, absence of war) (Galtung, 1969). Now we know that wars are fought for several reasons: Dominance, Economic, Territorial, Revenge and sorts.

As stated above according to the Deterrence theory, countries or nations amass weapons to prevent countries from trying to engage in wars with them, but we need to ask is the world really at peace and is there security, looking at the case of terrorism, the Al-Qaeda group, Boko Haram which have left people stranded, lose their homes and increase the loss of lives. How do countries engage the use of this autonomous

weapons or AI to sought for peace and security that these terrorist groups are preventing?

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. The study concluded that, technology is not the all-powering solution for peace but it's an option to be viewed.

AI empowers security agencies to effectively monitor, analyse, 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).

The office of the US presidency has authorised the deployment of drones in nations including Iraq, Afghanistan and Pakistan, which were used in both Combat and surveillance (Aisedion & Osimen, 2023). We see therefore that the advancement in technology has been used by the US government to eradicate leading Taliban and al-Qaeda commanders of Terrorism for world peace and stability. On January 3rd, 2020, the United States employed it in the situation involving an Iranian warlord, Soleimani, with a drone strike near Baghdad airport in Iraq (BBC, 2020).

AI has undoubtedly proven to be an asset to the military, effectively minimising human resources and mitigating casualties (Rashid, Kausik, Sunny, & Bappy, 2023).

Let's view a case whereby the use of Artificial Intelligence could have prevented loss of lives and soldiers. In June 2005, U.S special forces were deployed on a secret mission in Afghanistan in search of a Taliban leader, Osama Bin Landen. This crew that took up a position on the mountain was later discovered by goatherders, releasing them led to their demise plus the rescue helicopter sent for them, of which 16 soldiers were on board (Sandel, 2010). If the US forces had sent out a targeted drone through the intelligence, they had already gathered they could have prevented the loss of those soldiers' lives and that of the residence of Pashtun village which protected the last survivor from the Taliban's till his rescue as their secret mission became a world known one.

During the Gulf War of 1990–91, the United States utilised a software known as the Dynamic Analysis and Replanning Tool (DART) to enhance the effectiveness of scheduling and logistical coordination for transporting resources and personnel (Bienkowski, 1995).

While some argue that AI-powered weapons may enhance precision and minimise unintended harm, another school of thought, will argue that AI is not the only solution to peace and security as it has the potential for disastrous errors and ethical dilemmas related to algorithm-driven targeting choices (Abasilim, Gberevbie, Osibanjo, 2019; Ashby, 2023). As stated by Winfield (2019a), intelligent systems with great potential also pose notable ethical dilemmas (Bird, et al., 2020)

AI-powered systems offer revolutionary possibilities in the humanitarian field, yet they also present distinct challenges for human rights, even when implemented with the most noble of motives (Pizzi, Romanoff, & Engelhardt, 2020). The drone attack sent by the US, to eliminate Soleimani, the warlord, took 9 persons with him (BBC, 2020). Obviously, this targeted precision of AI has not been able to limit the target

space or area to just the individual as it will involve a scope. According to advocates like Sam Altman and Geoffrey Hinton, AGI (Artificial General Artificial Intelligence) has the potential to either assume the role of global governance or present serious existential risks on a global scale (Coeckelbergh, 2024).

For example, the Israel-Hamas conflict in May 2021, the utilisation of an AI target-creation platform called “the Gospel” by the IDF had significant ramifications. Regrettably, the rapid generation of targets led to severe repercussions for innocent civilians. The absence of clarity regarding the algorithmic choices made by the Gospel worsened the harm inflicted on non-combatants (The Guardian, 2023).

Humans have already been removed from certain battlefield contexts, autonomous systems in some battlefield situations have surpassed. These systems can calculate flight paths and intercept missiles faster than humans. While they offer benefits, they also pose risks, such as escalation management concerns. The proliferation of autonomous weapons, especially with the rise of uncrewed systems, is a growing worry due to their low costs and lack of defensive systems (Puscas, 2023).

Conclusion

AI has helped the military to reduce risk of humans dying at war as well and we see that the development of these Artificial Intelligence systems has been a way to broker peace and security between nations as seen above in the theory of Deterrence. Most nations will want to avoid the destruction of their country or killing of their people and therefore avoid fighting another nation that has acquired mass advancements in Artificial intelligence.

Advanced technologies significantly enhance defence capabilities by providing superior situational awareness, precision, and resilience. Innovations such as artificial intelligence, unmanned aerial vehicles, and cyber defence systems enable more effective threat detection and response, ensuring strategic advantages in modern warfare. These technologies not only safeguard national security but also drive continuous improvement in military operations, making them indispensable in today’s defence landscape.

The advancement in war technologies has been helpful in dealing with cases of terrorism that threaten the security of nations although AI has the ability to bring about many benefits in the field of international security. However, it is important to acknowledge and address the potential risks in order to fully harness the technology’s incredible capabilities.

Area for Further Study

The integration of AI into military operations offers both opportunities and risks. Responsible use of AI requires ongoing vigilance, thoughtful decision-making, and adherence to ethical principles. As we navigate this complex landscape, further research and collaboration are essential to ensure AI benefits strategic goals while minimising harm.

Does the positive impact, outweigh the negative impact of the implications of AI on global peace and security? Responsible AI deployment is paramount. How can we ensure that AI systems adhere to ethical norms in warfare? Balancing military effectiveness with humanitarian considerations requires rigorous exploration. Autonomous weapons, surveillance, and cyber warfare raise legal questions. Who is accountable for AI-driven actions-defining legal boundaries and ensuring compliance with international law demand thorough investigation? AI’s role in military contexts directly affects civilians. How can we minimise harm and protect non-combatants? Further study should also look at the question, is world peace attainable?

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