POLICY OUTLOOK

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Israel's AI-powered Genocide Raises New Moral Perils

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(Ashraf Amra - Anadolu Agency)

This policy outlook delves into the varied implications of AI technology in warfare, with a focus on Israel's onslaught on Gaza. It scrutinizes the ethical, legal, and societal aspects of AI integration, urging policymakers and stakeholders to address the ethical imperatives and geopolitical consequences of this technological advancement.

The opinions expressed in this policy outlook represent the views of the author(s) and do not necessarily reflect the views of the TRT World Research Centre.

Introduction

In the ever-evolving landscape of modern warfare, the integration of artificial intelligence (AI) technology has emerged as a significant force reshaping military strategies and tactics. Advocates herald AI's precision and efficiency as transformative assets, promising "cleaner" warfare with reduced human casualties and collateral damage. Yet, beneath the veneer of technological advancement lies a complex reality fraught with ethical, legal, and humanitarian dilemmas, particularly evident in case studies like Israel's actions in conflict zones such as Gaza.

This introduction endeavours to unravel the multifaceted implications of AI technology in warfare, using Israel's military operations as a lens to explore the stark contrasts between perceived benefits and the harsh realities of AI-driven warfare. Implications for AI-driven warfare on asymmetric warfare, reparation frameworks and international relations are then examined and analysed. Beyond the immediate tactical advantages, this policy outlook delves deeper into the broader societal and geopolitical consequences of AI integration, particularly in terms of its impact on human rights. The widespread adoption of AI technology in warfare signals a potential erosion of human rights as currently understood.

By critically examining the ethical, legal, and societal dimensions of AI in warfare, this paper aims to stimulate discourse on the profound implications of technological innovation on the fabric of society. Through an in-depth analysis of Israel's use of AI technology in Gaza and theoretical frameworks, this policy outlook aims to illuminate the complex interplay between technology, warfare, politics, and human rights, urging policymakers and citizens alike to grapple with the ethical imperatives of the age of AI.

AI Technology in Modern Warfare

Artificial intelligence (AI) technology encompasses a broad range of computational systems designed to simulate human-like intelligence and perform tasks that typically require human cognition. Characterised by its ability to learn from data, adapt to new situations, and make autonomous decisions, AI represents a paradigm shift in technology with profound implications for various domains, including military operations. The evolution of AI applications in military settings has been marked by significant advancements over the years, reflecting the continuous efforts to leverage cutting-edge technologies for strategic advantage. Initially, AI technologies in military operations were primarily focused on tasks such as data analysis, pattern recognition, and decision support. An emerging distinction is evident between the potentially beneficial civilian applications of AI technology, such as unmanned aerial vehicles facilitating medical deliveries, and the potentially harmful military uses, such as lethal autonomous weapons designed for combat operations. With the rapid progress in machine learning algorithms and computing capabilities, AI has become increasingly integrated into diverse military systems and platforms.

In the modern era, AI plays a pivotal role in enhancing military capabilities and strategies by augmenting AI-human decision-making processes and enabling more efficient and effective utilisation of resources. Through its ability to process vast amounts of data in real time and extract actionable insights, AI can empower military commanders with enhanced situational awareness and predictive capabilities, enabling them to make more informed decisions on the battlefield. By leveraging AI for mission planning, target identification, and predictive analysis, military forces can anticipate and respond to evolving threats allegedly more effectively, gaining a strategic edge over adversaries. Specifically speaking, AI-driven autonomous systems, such as drones and unmanned vehicles, are supposed to offer significant advantages in terms of speed, precision, and adaptability, enabling militaries to conduct operations with reduced risk to human personnel.

Implementation of AI Technology by Israel in Gaza

According to Neta Crawford, collateral damage is not an unavoidable or morally acceptable consequence of conflict. Instead, collateral damage should be viewed as a significant moral dilemma, particularly when it could have been foreseen and potentially mitigated through careful planning and decision-making. Responsibility for collateral damage extends beyond soldiers and commanders to encompass the broader organisational structure of warfare itself. By recognising that the causes and potential remedies for collateral damage are rooted in the institutional framework of war, systemic changes need to be made rather than focusing on individual moral culpability. The proposition of AI-enabled warfare technology centres on its capacity to refine the accuracy of military operations. According to proponents such as Robert Work, a former United States deputy secretary of defence, there exists a moral imperative for governments to adopt this technology, provided it can demonstrate a reduction in collateral damage and the protection of civilian populations.

Israel's use of AI technology in Gaza was meant to be demonstrative of AI technology's ability to target Hamas only while protecting Palestinian civilians living in Gaza. During its military operations in Gaza, the Israeli military has utilised an AI-powered system known as the Gospel to assist

in identifying targets. Another AI-powered system used by the Israeli Defense Forces (IDF), particularly in the early days of the war and revealed recently in an undercover investigation, is known as Lavender. Essentially, both Gospel and Lavender were used to produce targets, with a key difference being that the former produced targets for infrastructure such as buildings, while the latter targeted people in the form of 'kill lists'.

The IDF has thus far provided limited information about the Gospel system, which employs machine learning to analyse extensive datasets and generate potential targets for attacks rapidly. These targets have encompassed a range of locations, including schools, offices of aid organisations, places of worship, and medical facilities. In a lengthy expose by Israeli journalist Yulav Abraham, the tool, developed by the Israeli military, analysed a vast collection of surveillance data and other relevant information to pinpoint targets for assassination. Linked to Lavender is a tracking software known as "Where's Daddy?" that tracks the targets produced by Lavender. Most of the time, alleged junior Hamas operatives are targeted at night while in their homes with their families: in the first month of the war, more than half of the fatalities - 6120 people - belonged to 1340 families, many of which were completely wiped out while inside their own homes. According to an intelligence source, even some minors were marked by Lavender as targets for bombing: "normally, operatives are over the age of 17, but that was not a condition" for the system.

While the Israelis claim they use AI to solely target the Gazan resistance, nothing could be farther from the truth. According to an investigative report, extremely loose rules of engagement on civilian casualties were followed: 10-20 civilians were permitted to be killed as part of a strike on a low-level Hamas member, and up to 100 civilians were fair game to get at a senior commander. In terms of numbers, At a 10 per cent error rate acceptable to the IDF, AI Lavender might have falsely identified 3700 individuals in Gaza as Hamas members, leading to potential harm to innocent civilians living near them. This could have resulted in up to 20 civilians being killed in each strike on these individuals, resulting in a total of 77,700 innocent non-combatants being inadvertently harmed by inaccurate AI assessments. The AI-powered system is being termed a "mass assassination factory".

Can AI-Powered Weapons Limit Collateral Damage?

At the time of writing, the death toll in Gaza has risen to 32,845, and 75,392 people have been injured. More than 70 per cent of the deaths are women and children. This is in response to an attack by Palestinian militant group Hamas in southern Israel on October 7, 2023, during which about 1,200 people were killed and more than 250 were taken hostage. As Gaza deaths rise, experts, such as Toby Walsh, chief scientist at the University of New South Wales AI Institute in Australia, are beginning to question the veracity of claims made by Israel regarding its AI-powered targeting system as "either the AI is as good as claimed and the IDF (Israeli military) doesn't care about collateral damage, or the AI is not as good as claimed".

Investigating the latter scenario first, Dr Jeremy Davis from the University of Florida firstly questions the ethics of whether algorithms should be trusted at all when it comes to killing human beings. Algorithms incorporate both historical and predictive elements, leveraging existing data about individuals, such as biometric information, while also forecasting their future actions and whereabouts. This dual functionality can assist in decision-making processes. However, the evidence that is offered by these algorithms may not be enough to kill a human, as has been documented before in many cases of innocent civilians killed in Pakistan by US drone strikes. The key question at hand is not whether information derived from an AI device could be deemed as evidence in principle. The question is whether the algorithms, in their current state, furnish sufficient evidence within the contexts in which they are utilised and for the specific tasks, which can be extremely consequential, like the death of innocent children. Like many algorithmic systems, the ones being used by the Gospel and Lavender systems are also essentially opaque. This means that users, such as the IDF, cannot explain why the algorithms reach the conclusions they do. Unlike human deliberation, where one can ask for clarification, these algorithms provide an answer without providing the reasoning or data behind it, even in the best-case scenarios.

One can say that the algorithms can be trusted to have sufficient evidence to target a human being if the data they have been trained on is almost flawless. However, bad input data is common and filters through, resulting in decisions such as the one that led to the deaths of aid workers from World Central Kitchen who were working to provide food aid to Palestinians in Gaza in what many described as a 'man-made famine'. In reference to the use of bad data, according to the New York Times, another AI system was used to provide a live estimate of the number of Palestinians who fled the northern Gaza Strip southward. Reportedly, "this model was not connected to reality" as it inaccurately estimated the population of a neighbourhood during a conflict. The program assumed half the residents had left, leading to erroneous assessments of occupancy in targeted houses. As a result, when strikes were carried out without verifying the actual number of people present, higher civilian casualties resulted. Despite knowing the risks, the Israeli military adopted this model, leading to automated and statistically-based collateral damage calculations, with casualties being reported as non-whole numbers.

Unless the algorithms are adjusted for the mistakes made, the nature of predictive algorithms is such that they will continue to replicate incorrect decision-making and responses to an exponential degree. It was only after aid workers from a foreign aid organisation were killed that Israel admitted to a mistake and promised an independent investigation after the UK, US, Canada, Australia and Poland lost nationals in the attack. Not after the killings of thousands of innocent civilians, most of them being women and children. It can be said that the algorithms are continuing to learn that the Palestinian civilians are to be targeted, and they are presumably not being fixed or stopped, so they will continue to get worse. That does not make them effective in terms of their stated purpose of reducing collateral damage and protecting civilian populations.

The IDF has mostly chosen not to comment on its use of AI-guided bombs in Gaza or any other AI applications in the conflict. However, in a public statement made in February, an IDF spokesperson clarified that while the Gospel system is utilised to identify potential targets, the ultimate decision to carry out a strike is made by a human operator and requires approval from at least one other individual in the chain of command. That brings up the earlier assertion by Toby Walsh that the AI is as good as claimed, and the IDF doesn't care about collateral damage. To assess this, evidence-relative justification versus fact-relative justifications can be considered. When scrutinising an algorithmic decision to target an individual, an evidence-based justification would inquire whether the targeted person poses a threat of causing harm based on algorithmic data.

In contrast, a fact-based justification would inquire whether the individual was engaged in harmful actions. In the case of thousands of innocent women and children being killed, and given the IDF's public statement in this context, can it be said that IDF personnel are making the final call to kill them? It is hard to imagine thousands of unarmed children being ready to kill while playing in refugee camps or mothers nursing their injured family members in hospitals. Intelligence sources working for the IDF being interviewed anonymously have said that they knew they were going to kill civilians while attempting to kill Hamas operatives, sometimes over one hundred of them in a single strike.

Multiple reports in Israeli media emphasise the precision of strikes recommended by the "AI target bank," aiming to minimise harm to non-involved civilians. However, AI and warfare experts have expressed scepticism, noting the lack of empirical evidence supporting claims of reduced civilian harm. Observers point to the visible impact of bombardment on the physical landscape of Gaza, suggesting that claims of precision and minimal force are not supported by the evidence (see Image 1).



Image 1: *Satellite images of the northern Gaza before (October 10) and after (October 21) damage caused by the war (source)*

The extent of damage to civilian infrastructure in Gaza has led to a range of dire consequences, including displacement, disruption of essential services such as healthcare and education, economic setbacks, and long-term psychological and social impacts on affected populations. It will continue to exacerbate human suffering, prolong the cycle of conflict, and impede post-conflict recovery efforts.

Implications for Asymmetric Warfare, Reparation Frameworks, and International Relations

The deployment of AI technology in warfare, particularly in the context of the conflict between Israel and Gaza-based militant groups, has multifaceted implications for conflict dynamics, ethics, and legality. Firstly, asymmetrical warfare as a concept will be impacted. As recently as 2018, a paper published by the Brookings Institution called AI a 'weapon of the weak' as Russian AI-driven information warfare became increasingly more prominent in Russian strategic thinking and military operational practice. Will the use of AI by the IDF for supposedly more precise targeting to minimise harm to civilians, which is ineffective



(Raşid Necati Aslım - Anadolu Agency)

as can be evidenced above, also be labelled as a weapon of the weak? Moreover, the use of AI poses challenges for military and intelligence operations in irregular warfare such as proxy or undeclared wars. Maintaining operational security is critical, as discovery risks endanger the safety of forces and partners and tarnish global reputation. With that said, technologies like facial recognition and biometrics make it difficult to conceal soldiers or equipment, which is common practice in asymmetrical warfare.

Secondly, given the unprecedented scale of the destruction caused by AI-driven warfare in Gaza, ethical concerns regarding civilian safety as well as rebuilding approaches must be reconsidered. The systematic destruction of civilian infrastructure in Gaza is condemned as a crime against humanity and war crimes by UN experts, who have termed it a 'domicide'. Israeli officials' calls for Palestinians to leave Gaza and expressions of interest in building settlements, particularly valuable "Gaza beachfront" properties as claimed by Jared Kushner, a former US official, suggest broader intentions beyond military objectives against Hamas.

As the use of AI tools in warfare becomes increasingly prevalent, there is a pressing need to establish international legal frameworks that address the significant impact on civilian populations and infrastructure. Such frameworks should prioritise reparations in rebuilding efforts, ensuring accountability, and addressing the scale of harm inflicted on civilian life and property. Additionally, there is a need to consider potential arms control measures for AI technology in conflict zones to ensure its responsible and ethical use.

Moreover, the international community's response to Israel's use of AI technology in Gaza and the broader ethical considerations surrounding its implementation in warfare come under scrutiny. While the UN General Assembly approved a new draft resolution aimed at ensuring that algorithms do not have complete control over decisions involving lethal action in November 2023, questions are being raised about Israel's adherence to ethical and legal standards in its utilisation of AI technology and whether it complies with the current rules of engagement and international humanitarian law. This is especially relevant given that certain Israeli startups producing AI-enabled military products are now marketing their destructive utilisation in Gaza as a selling point.

The global response to the current deployment of military AI, exemplified by Israel's use in Gaza, is poised to establish a precedent for its future development and application. As a warning, a recent experiment conducted by US researchers involved employing large language models like GPT-4 to simulate nations in a wargaming exercise. The outcomes revealed a propensity for these models to become ensnared in arms races and inadvertently escalate conflicts, sometimes even resorting to the use of nuclear weapons, giving 'worrying justifications based on deterrence and first-strike tactics'.

With that said, the US has avoided commenting directly on Israel's use of AI weapons in Gaza: the US itself is currently evaluating several AI technologies developed in Israel for potential use by its military forces, with some of these projects receiving funding from the US. Under a decade-long agreement on military aid, the US provides Israel with 3.3

billion USD annually in Foreign Military Financing grants, along with an additional 500 million USD per year allocated for missile defence programs - some of which have been used in the Gaza conflict.

However, as reports of mass devastation and the sheer numbers of killed, injured and displaced Palestinian civilians continue to emerge, regional and US human rights groups are pressuring Washington for accountability, but Israel has refused to sign a US-backed treaty pushing for the responsible use of AI in war. This reluctance underscores a potential strain on the US-Israel relationship, casting doubt on US influence and raising concerns about American diplomatic efficacy in the Middle East and broader global alliances. Experts have increasingly begun to warn President Biden against pledging "ironclad" support to Israel: the 'US ought to be distancing itself from Israel's illegal attack, but instead the Biden administration is moving to shield Israel from the consequences of its own actions'. As Israel is increasingly viewed as a 'strategic liability' by some, there is a possibility of a re-evaluation of the US-Israel relationship, potentially leading to broader shifts in US-Middle East relations.

Human Rights in Jeopardy?

Apart from the legal and political challenges of ensuring ethical conduct in AI and warfare, there are moral concerns about replacing human functions with such technology, with implications for the provision and practice of human rights. Evidence indicates that potential violations of humanistic principles can arise from technological advancements. Central to these principles are individuality, mutual respect, and recognition of human dignity. However, an overemphasis on science and technology may impede efforts to fully ensure the future advancement of humanity and, consequently, the protection of human rights. At the heart of ethical considerations in warfare lies humanity's centrality in rational thought, action, and normative frameworks. The imperative to preserve human dignity justifies the restraints on the methods and means of warfare, and so are the collective aspirations to have lasting peace among nations.



(Jehad Alshrafi - Anadolu Agency)

Unlike utilitarian arguments that prioritise the 'utilitarian calculus' of autonomous weapons for their perceived cost-effectiveness or life-saving capabilities, non-consequentialist and deontological principles, based on Kantian ethics, can develop rules and engagement frameworks that are valued for their intrinsic worth rather than their instrumental utility or pursuit of a broader societal good. The inherent value of such regulations is ultimately based on the intrinsic value of human beings themselves.

If the intrinsic value of human beings is disregarded, as demonstrated by a utilitarian approach to warfare that prioritises the perceived efficiency of AI weapons in military planning and action, the consequences for human rights could be dire. The rise of AI-powered autonomous weapons threatens to devalue the roles and contributions of individuals in society, particularly in the context of warfare and military service. This shift towards reliance on AI systems may lead to a reduction in human rights provisions as governments become less dependent on citizen participation in defence forces. Consequently, there is a risk of a subtle yet significant transformation in governance, potentially favouring less democratic and more authoritarian regimes with diminished emphasis on the protection and provision of human rights.

Conclusion

In conclusion, the integration of AI technology into warfare heralds a new era fraught with ethical, legal, and humanitarian implications. While promising advancements in precision and efficiency, the realities of AI-driven warfare, exemplified by Israel's actions in Gaza, underscore the urgent need for critical examination and proactive engagement. This policy outlook has elucidated the multifaceted dimensions of AI in warfare, urging policymakers and citizens alike to confront the ethical imperatives and human rights considerations inherent in the age of AI. Moving forward, informed discourse and ethical frameworks must guide the complexities of AI integration responsibly, ensuring that technological progress aligns with shared values of justice, accountability, and human dignity on the battlefield and beyond.