The Fallacy of Precision: Deconstructing the Narrative Supporting AI-Enhanced Military Weaponry

Sonia Fereidooni Cambridge Digital Humanities University of Cambridge Cambridge, UK sf752@cam.ac.uk Vicka Heidt Department of Politics and International Studies University of Cambridge Cambridge, UK vch31@cam.ac.uk

1 Extended Abstract.

Recent pro-military arguments have attempted to morally justify the integration of AI into military systems, claiming it leads to more precise and sophisticated weaponry. However, this narrative obscures the reality of AI-based weaponry and is deeply flawed for several reasons. First, the use of AI in military contexts is morally reprehensible, as it perpetuates violence and dehumanization through biased training data and the unethical experimentation on human lives, undermining claims of ethical justification [21] [19] [3]. The development of AI-powered autonomous weapon systems often relies on datasets that reflect existing societal biases, potentially leading to discriminatory targeting and disproportionate impacts on marginalized communities [21] [4]. Furthermore, the refinement of these systems necessitates a troubling "trial and error" approach using real-world conflicts as testing grounds, effectively treating human lives as expendable data points for AI optimization [14] [15]. Second, contrary to the assertion that AI enhances precision and human control, military AI often leads to reduced oversight, human control, and accountability. In practice, AI military systems, such as autonomous weapon systems (AWS), fail to adequately distinguish between combatants and civilians [14]. Finally, the deployment of AI in warfare contradicts current international humanitarian law (IHL), rendering its use legally indefensible.

This paper aims to critically investigate the misleading philosophies driving the push for militaristic AI. This paper argues that militaristic AI is (1) morally indefensible because it necessitates extensive experimentation on human lives to develop sophisticated AI weaponry, disproportionately affecting marginalized communities in the Global South, (2) is associated with reduced human control and precision, evidenced by the high civilian toll inherent in currently deployed AI military systems, and (3) constitutes a violation of IHL. The paper presents case studies of AI systems like "Where's Daddy?", "Lavender", and "The Gospel," employed by the Israel Defense Forces (IDF) in Palestine, demonstrating how AI-driven "kill lists" disregard civilian casualties and facilitate the automation of violence [1] [2]. By unmasking the deceptive rhetoric surrounding military AI, this paper aims to elicit critical discourse on the practical ramifications of the use of AI in warfare.

1.1 How do you feed a biased killing machine? Through killing.

The development of sophisticated AI-integrated weaponry for military applications carries profound ethical implications, necessitating extensive experimentation on human lives, particularly in marginalized communities of the Global South [6] [17] in order to refine and improve such sophisticated technology [18]. This grim reality stands in stark contrast to the sanitized narratives often presented by proponents of military AI. The pursuit of "precise" and "intelligent" weapons systems is not a sterile laboratory exercise, but rather a process that inherently involves real-world testing with lethal and devastating and practical consequences. In conflict zones, particularly in the Global South, vulnerable populations are used as test subjects for these emerging technologies. The Israeli Defense Forces' deployment of AI systems like "Where's Daddy?", "Lavender", and "The Gospel" in Gaza serves as a chilling example, where Palestinians on AI-generated "kill lists" become de facto experimental targets [1] [2] [24]. The pursuit of "precise" and "intelligent" weapons systems is marred by inherent biases in AI training data, potentially leading to disproportionate targeting of vulnerable populations [11] [3] [4]. This approach not only violates fundamental human rights but also perpetuates a cycle of violence and exploitation. Moreover, the current high error rates in AI systems mean that achieving the purported precision requires an unconscionable amount of "trial and error" with human lives at stake [17] [18]. This approach not only violates fundamental human rights but also challenges core principles of military ethics and IHL—including distinction, proportionality, and precaution in attack development [6] [18] [24].

1.2 AI military systems operate through algorithmic detachment, costing human oversight.

The integration of AI into military operations represents a profound and disturbing shift in the nature of warfare, associated with reduced human control and precision, contrary to claims of enhanced accuracy and precision. AI systems operate with algorithmic detachment, lacking the nuanced decision-making capabilities of human oversight, particularly in complex combat zones [16] [22]. This limitation is evidenced by the high civilian toll inherent in currently deployed AI military systems, such as the aforementioned systems being used against Gazans as of October 7th, 2023 [1] [2] [13]. The emotional and ethical detachment of AI systems, while touted as a feature by proponents, actually represents a critical flaw that can result in indiscriminate use of force [22] [25] [23] [9] [12]. Recent studies have shown that AI-driven targeting systems often struggle with contextual understanding and may fail to recognize situations where restraint is necessary, leading to potential violations of international humanitarian law [16] [25]. Furthermore, the reduced human oversight in AI-powered military operations creates a dangerous disconnect between the act of killing and its moral implications, potentially lowering the threshold for the use of lethal force [25] [23]. As AI continues to be integrated into military applications, there is a growing concern that the decision to end human lives may be increasingly delegated to machines, raising serious ethical questions about accountability and the fundamental nature of warfare [16] [22] [23].

1.3 AI military systems violate current IHL.

The deployment of AI in warfare raises significant legal concerns, particularly within the framework of IHL. IHL is grounded in the universally-ratified 1949 Fourth Geneva Convention, which mandates that military actions adhere to principles of distinction, proportionality, and necessity—ensuring the protection of civilians and civilian infrastructure during conflict [20]. However, AI systems lack the human judgment and contextual awareness necessary to fully comply with these principles, often making it difficult to ensure that attacks are both precise and proportionate [10] [5]. The use of autonomous weapons systems also erodes accountability, as it becomes unclear who is responsible for decisions made by AI; deep learning AWS, in particular, raises difficulties with meeting the mental element portion for individual criminal responsibility, per Article 30 of the ICC Statute [7] [8]. This lack of accountability, coupled with the potential for indiscriminate harm, renders the use of AI in military operations legally indefensible under existing IHL frameworks, highlighting the need for new legal models to restrict the integration of AI in military applications and address its ongoing risks [5].

References

- Y. Abraham. 'a mass assassination factory': Inside israel's calculated bombing of gaza, November 2023. URL https://www.972mag.com/ mass-assassination-factory-israel-calculated-bombing-gaza/.
- [2] Y. Abraham. 'lavender': the ai machine directing israel's bombing spree in gaza, April 2024. URL https://www.972mag.com/lavender-ai-israeli-army-gaza/.
- [3] S. Ams. Blurred lines: the convergence of military and civilian uses of ai & data use and its impact on liberal democracy. *International Politics*, 60:879 – 896, 2021. URL https: //api.semanticscholar.org/CorpusID:239677093.

- [4] I. Bhila. Putting algorithmic bias on top of the agenda in the discussions on autonomous weapons systems. *Digital War*, 2024. URL https://api.semanticscholar.org/CorpusID: 270183027.
- [5] M. Bo, L. Bruun, and V. Boulanin. Retaining Human Responsibility in the Development and Use of Autonomous Weapon Systems: On Accountability for Violations of International Humanitarian Law Involving AWS. Stockholm International Peace Research Institute, 2022. doi: 10.55163/ahbc1664. URL http://dx.doi.org/10.55163/AHBC1664.
- [6] S. G. R. BOKIL. A bibliometric analysis of autonomous weapons and international humanitarian law. *Russian Law Journal*, 2023. URL https://api.semanticscholar.org/CorpusID: 259411183.
- [7] N. Davison. A legal perspective: Autonomous weapon systems under international humanitarian law. UN, 2018. ISBN 9789213628942. doi: 10.18356/29a571ba-en. URL http://dx.doi. org/10.18356/29a571ba-en.
- [8] U. N. P. C. for the International Criminal Court. Rome Statute of the International Criminal Court. UN, 1998.
- [9] T. Gregory. Targeted killings: Drones, noncombatant immunity, and the politics of killing. *Contemporary Security Policy*, 38:212 – 236, 2017. URL https://api.semanticscholar. org/CorpusID:158205208.
- [10] A. R. Greipl. Data-driven learning systems and the commission of international crimes: Concerns for criminal responsibility? *Journal of International Criminal Justice*, 21(5): 1097–1118, September 2023. ISSN 1478-1387. doi: 10.1093/jicj/mqad031. URL https: //doi.org/10.1093/jicj/mqad031.
- [11] Y. Gunawan, M. H. Aulawi, R. Anggriawan, and T. A. Putro. Command responsibility of autonomous weapons under international humanitarian law. *Cogent Social Sciences*, 8, 2022. URL https://api.semanticscholar.org/CorpusID:253218527.
- [12] M. Haas and S.-C. Fischer. The evolution of targeted killing practices: Autonomous weapons, future conflict, and the international order. *Contemporary Security Policy*, 38:281 – 306, 2017. URL https://api.semanticscholar.org/CorpusID:158331881.
- [13] R. Khatib, M. McKee, and S. Yusuf. Counting the dead in gaza: difficult but essential. *The Lancet*, 404(10449):237–238, July 2024. ISSN 0140-6736. doi: 10.1016/S0140-6736(24) 01169-3. URL https://doi.org/10.1016/S0140-6736(24)01169-3.
- [14] O. Kostenko, T. L. Jaynes, D. Zhuravlov, O. Dniprov, and Y. Usenko. Problems of using autonomous military ai against the background of russia's military aggression against ukraine. *Baltic Journal of Legal and Social Sciences*, 2023. URL https://api.semanticscholar. org/CorpusID: 255737851.
- [15] O. V. Kostenko. The probability of military aggression of autonomous ai: assumptions or imminent reality (analyzing the facts of russian war against ukraine). Analytical and Comparative Jurisprudence, 2022. URL https://api.semanticscholar.org/CorpusID:251783636.
- [16] C. Maathuis. On the road to designing responsible ai systems in military cyber operations. European Conference on Cyber Warfare and Security, 2022. URL https://api. semanticscholar.org/CorpusID:249554456.
- [17] A. Maqbool and A. Anwar. Warfare and machines: An in-depth study of autonomous weapons in the context of international humanitarian law. Society, Law and Policy Review, 2023. URL https://api.semanticscholar.org/CorpusID:268300599.
- [18] N. Nnamdi, B. O. Eniola, and B. Abegunde. Examining lethal autonomous weapons through the lens of international humanitarian law. *Scholars International Journal of Law, Crime and Justice*, 2023. URL https://api.semanticscholar.org/CorpusID:259561180.

- [19] E. Ntoutsi, P. Fafalios, U. Gadiraju, V. Iosifidis, W. Nejdl, M.-E. Vidal, S. Ruggieri, F. Turini, S. Papadopoulos, E. Krasanakis, I. Kompatsiaris, K. Kinder-Kurlanda, C. Wagner, F. Karimi, M. Fernandez, H. Alani, B. Berendt, T. Kruegel, C. Heinze, K. Broelemann, G. Kasneci, T. Tiropanis, and S. Staab. Bias in data-driven ai systems – an introductory survey, 2020. URL https://arxiv.org/abs/2001.09762.
- [20] I. C. of the Red Cross (ICRC). Geneva convention relative to the protection of civilian persons in time of war, August 1949. URL https://www.un.org/en/genocideprevention/ documents/atrocity-crimes/Doc.33_GC-IV-EN.pdf.
- [21] A. Oluka. Mitigating biases in training data: Technical and legal challenges for sub-saharan africa. *International Journal of Applied Research in Business and Management*, 2024. URL https://api.semanticscholar.org/CorpusID:270016690.
- [22] R. Simmons-Edler, R. Badman, S. Longpre, and K. Rajan. Ai-powered autonomous weapons risk geopolitical instability and threaten ai research, 2024. URL https://arxiv.org/abs/ 2405.01859.
- [23] G. D. Solis. *The Law of Armed Conflict: International Humanitarian Law in War*. Cambridge University Press, 3 edition, 2021.
- [24] E. Tsybulenko and A. Kajander. Customary international humanitarian law and article 36 of additional protocol i to the geneva conventions: A stopgap regulator of autonomous weapons systems? *TalTech Journal of European Studies*, 12:87 – 112, 2022. URL https://api. semanticscholar.org/CorpusID:255186818.
- [25] A. Warren and A. Hillas. Lethal autonomous robotics: Rethinking the dehumanization of warfare. UCLA Journal of International Law and Foreign Affairs, 22(2):218–249, 2018. ISSN 10892605, 21697833. URL http://www.jstor.org/stable/45302406.