

Digital technologies and Mosaic warfare. The new frontiers of cyber warfare and its social vulnerabilities

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The increasing integration of artificial intelligence (AI) into military strategies has reshaped contemporary warfare, giving rise to Mosaic Warfare, a paradigm characterized by modular, networked, and autonomous systems. This study investigates how Mosaic Warfare is transforming military decision-making, to what extent AI contributes to the dehumanization of war, and what opportunities and risks this evolution entails. Using a comprehensive literature review, the paper bridges insights from military strategy, AI ethics, and sociology. The findings highlight growing vulnerabilities, ethical dilemmas, and the risks of uncontrolled escalation, emphasizing the urgent need for ethical oversight in the militarization of AI.

Keywords: Mosaic Warfare; artificial intelligence in warfare; gamification; opportunities and risks; ethics of autonomous weapons, social vulnerabilities.

Tecnologie digitali e Mosaic Warfare. Le nuove frontiere della cyberguerra e le sue vulnerabilità sociali

La crescente integrazione dell'intelligenza artificiale (IA) nelle strategie militari sta contribuendo a ridefinire la guerra contemporanea verso la Mosaic Warfare, un paradigma caratterizzato da sistemi modulari, interconnessi e autonomi. Questo contributo analizza i cambiamenti introdotti dalla Mosaic Warfare nel processo decisionale militare, problematizza il contributo che l'IA può dare alla deumanizzazione del conflitto e vaglia le opportunità e rischi di questa evoluzione. Attraverso una ricognizione della letteratura, le ricercatrici hanno cercato di far dialogare prospettive sociologiche, etiche e degli studi strategici. I risultati evidenziano crescenti vulnerabilità, dilemmi etici e il rischio di escalation incontrollata, sottolineando la necessità di una regolamentazione etica della militarizzazione dell'IA.

Parole chiave: Mosaic Warfare; intelligenza artificiale nella guerra; gamification; opportunità e rischi; etica delle armi autonome; vulnerabilità sociali.

DOI: 10.5281/zenodo.17524020

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This article is the result of the two author's joint work. Nonetheless, for a more detailed task division, Isabella Corvino wrote par. 1, and Romina Gurashi wrote par. 2, 3, and Conclusions.

Sicurezza e scienze sociali XIII, 2bis/2025, ISSN 2283-8740, ISSN e 2283-7523

1. AI and Mosaic Warfare

For OECD (2016: 11), AI is: «a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments [...] AI systems are designed to operate with varying levels of autonomy» (2016: 11). Advances in machine learning improve system accuracy while simultaneously introducing new risks, challenges, and uncertainties. The use of AI in modern society is transforming various fields, including warfare. The integration of these technologies into tools, weapons, and military strategies is reshaping conflict dynamics, expanding the battlefield to any technologically accessible space.

Global security is evolving, yet legal frameworks struggle to keep pace with these rapid changes, necessitating a reassessment of military ethics. The asymmetry of knowledge between the developers of these tools, policymakers, and citizens often results in outdated or ineffective regulations. Companies not only obtain data but also leverage interconnected networks to further expand their access, increasing their power of knowledge and control. This growing asymmetry fosters a climate of fear among citizens, who find themselves increasingly unable to navigate technologies that have become pervasive.

Within this framework, this article aims to explore the following research questions: what transformations is Mosaic Warfare introducing in the paradigm of war? How is AI contributing to its dehumanization? What opportunities and risks does this evolution entail?

To answer these questions, this study conducts a comprehensive review of the existing literature on Mosaic Warfare and AI, aiming to bridge these areas within a unified theoretical framework.

The adoption of AI in the military stems from the need to accelerate decision-making processes and maximize the effectiveness of operations, leveraging computational power that surpasses human intelligence, while still keeping humans as central actors in every activity. AI systems in the military excel at analyzing large data sets in real-time, identifying patterns that enhance and expedite decision-making, even generating automated decisions, such as in autonomous weapon systems (Moskowitz *et al.*, 2011; Clark, 2020). They reduce uncertainty by continuously acquiring real-time data, allowing quick adjustments. However, knowledge in warfare becomes obsolete rapidly, and speed is crucial for military decision-makers. As wars grow more complex and urbanized, AI-powered decision support systems are essential for achieving informational superiority over the enemy (Jacobsen,

Liebetrau, 2023). The need to anticipate the enemy's decisions is driving the improvement of predictive analysis systems to foresee the opponent's moves based on specific probability indicators. Efforts are even underway to teach AI decision-making systems to bluff, enabling them to devise strategies and deceptive tactics (game theory). The militarization of AI raises complex ethical, legal, and political issues, requiring careful consideration due to the risks of civilian casualties and collateral damage (Docherty, 2012; Morgan *et al.*, 2020; Sabry, 2021). The concept of trust becomes crucial in these uncertain conditions. Trust in science, in governmental stakeholders, in common idea of future. We chose to «define trust as a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another entity (e.g. an AI system) [...] Trusting' without good reasons (or positive expectations) is not trust at all; it amounts to hope or blind faith» (Lockey *et al.*, 2021: 5464). The issue of trust extends beyond the human-machine relationship to the trust between humans, as concerns about the loss of capabilities due to AI use are becoming increasingly apparent. Moreover, to increase trust in machines, significant efforts have been made to anthropomorphize the language of these systems. «Anthropomorphism involves the inclusion of human-like characteristics into an AI's design. It has been theorized that the more human-like an AI agent is, the more likely humans are to trust and accept it. However, there are concerns that over-anthropomorphism may lead to overestimation of the AI's capabilities, potentially putting the stakeholder at risk, damaging trust, and leading to a host of ethical and psychological concerns, including manipulation» (Lockey *et al.*, 2021: 5466).

Excessive reliance on AI-assisted intelligence systems, along with the spread of false or misleading information through enemy disinformation operations, can distort data analysis, amplifying initial errors and compromising military operations. In response, a new military doctrine, the 4GW (Fourth Generation Warfare), has emerged. This doctrine proposes a hybrid approach, combining network-centric warfare¹ with more traditional, “primitive” tactics that can confuse and disrupt highly technological military intelligence systems, making battlefield actions more unpredictable and potentially more successful. A contradiction emerges in these complex systems:

¹ Network-centric warfare, introduced by the U.S. in the 1990s, laid the groundwork for AI militarization. It leverages a network of dispersed computers and sensors to accelerate decision-making and gain a military advantage. The goal is information dominance, leading to superiority over the enemy. Admiral William A. Owens introduced the “system of systems” concept, linking intelligence sensors, command systems, and precision weapons to enhance situational awareness on the battlefield.

the more their actions are maximized, the more human compensatory intervention becomes necessary.

Table 1. Concept matrix of the five AI trust challenges and the respective vulnerabilities each creates for stakeholders

AI trust challenge	Stakeholder vulnerabilities		
	Domain expert	End user	Society
1. Transparency and explainability	<ul style="list-style-type: none"> Ability to know and explain AI output, and provide human oversight Manipulation from erroneous explanations 	<ul style="list-style-type: none"> Ability to understand how decisions affecting them are made Ability to provide meaningful consent and exercise agency 	<ul style="list-style-type: none"> Knowledge asymmetries Power imbalance and centralization Scaled disempowerment
2. Accuracy and reliability	<ul style="list-style-type: none"> Accountability for accuracy and fairness of AI output Reputational and legal risk 	<ul style="list-style-type: none"> Inaccurate / harmful outcomes Unfair / discriminatory treatment 	<ul style="list-style-type: none"> Entrenched bias / inequality Scaled harmed to select populations
3. Automation	<ul style="list-style-type: none"> Professional over-reliance and deskilling Loss of expert oversight Loss of professional identity Loss of work 	<ul style="list-style-type: none"> Loss of dignity (humans as data points; de-contextualization) Loss of human engagement Over-reliance and deskilling 	<ul style="list-style-type: none"> Scaled deskilling Reduced human connection Scaled technological unemployment Cascading AI failures
4. Anthropomorphism and embodiment	<ul style="list-style-type: none"> Professional over-reliance Psychological wellbeing 	<ul style="list-style-type: none"> Manipulation through identification Over-reliance and over-sharing 	<ul style="list-style-type: none"> Manipulation through identification Human connection and identity
5. Mass data extraction	<ul style="list-style-type: none"> Accountability for privacy and use of data Reputational and legal risk 	<ul style="list-style-type: none"> Personal data capture and loss of privacy Inappropriate re-identification and use of personal data Loss of control 	<ul style="list-style-type: none"> Inappropriate use of citizen data Mass surveillance Loss of societal right to privacy Power imbalance & societal disempowerment

Source: Lockey *et al.*, 2021: 5468.

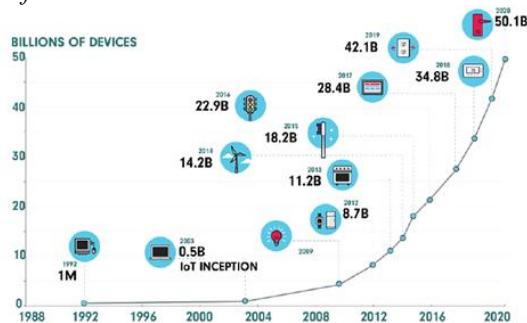
The constant reliance on automated decision-making systems could lead to over-dependence on technology, which may prove fatal in battle. Furthermore, the use of advanced systems by both sides could make strategies predictable, leading to failure. Disinformation plays a crucial role in psychological operations (psyops) to deceive the enemy. Future soldiers will need not only speed and agility but also the ability to think critically and anticipate threats, requiring a balance between human judgment and technological support as warfare becomes increasingly data-driven and automated. Technology is meant to “equip” humans, not replace them, but it’s important to remember that it cannot reduce war to simply using equipment (Goldfarb, Lindsay, 2022). At the same time humans, fascinated by the idea of machines (D’Andrea, 2005), continue to enhance aspects of themselves in alignment with these technologies, attempting to integrate into a non-human system. To perform activities in the same way as machines, a gamification of war is becoming increasingly evident. A drone operator can intervene to correct or limit errors that might occur safe from the battlefield. Without a human operator to target, the enemy’s priority would be to attack the electromagnetic control signals of the autonomous weapon system, a fully autonomous systems, however, would reduce vulnerability. But should a machine

autonomously perform such a delicate task? Information programmed into the AI cannot cover all unpredictable and changing aspects of reality, potentially leading to endangering human lives (Garcia, 2024). Humans and machines are becoming alternatives.

Do remotely piloted military robotics create excessive moral distance from war at the operator level? Horowitz (2016) unlike what Singer (2009) suggested with PlayStation mentality in his book “Wired for War” pointed out that one’s actions might not be immediately apparent or emotionally impactful, which can foster a sense of impunity, where individuals fail to feel accountable for the outcomes of their actions. The lenses of monitors could create an emotional distance, which adds to moral indifference and people in command blur the sense of responsibility: a new challenge to preserve empathy and ethical values emerges (Manhas, 2023). The operators, not sufficiently aware of the consequences of their behaviour and caused damage (OliverosAya, 2023) while living a sense of deep alienation. «As Simone Weil and Hannah Arendt cautioned, an overemphasis on technological means over human responsibility risks dehumanizing war. While drones may reduce the vulnerability of military personnel, they also obscure the brutal realities of conflict, necessitating robust ethical frameworks to address the evolving challenges posed by robotic warfare and its impact on military power» (Meyer, 2024: 18).

In this grand game, which is progressively expanding beyond the boundaries of the battlefield, every device connected to the network essentially becomes a potential target, especially due to the need we have created around them. Just looking at the table showing the number of devices and the growth curve globally we can imagine how exposed we are to attacks that were once confined within much more clearly defined boundaries. The IoBT (Internet of Battlefield Things) reaches home.

Table 2. Growth of IoT devices.



Source: Cisco.

2. Opportunities and risks of AI in Mosaic warfare: a sociological perspective

The transformation of warfare toward the Mosaic Warfare concept – devised by the U.S. Defense Advanced Research Projects Agency (DARPA) – represents a radical paradigm shift in how contemporary military strategies are conceived. This new paradigm is increasingly grounded in flexibility and the modular use of specialized systems. Such a change, as can be easily surmised, carries significant sociological implications, including a rethinking of power dynamics, decision-making responsibilities, and the inherent vulnerabilities of digital society.

Although Mosaic Warfare is being developed primarily for its touted potential advantages, it also carries many associated risks. A summary of these advantages and risks is provided in Table 3 below.

Table 3. Potentialities and Risks of Mosaic Warfare.

Potenzialità	Rischi
Operational flexibility and adaptability	Command and Control (C2) complexity
Decision overload for the adversary	Interoperability and technological fragmentation
Cost-effectiveness and sustainability	Communications security and electronic warfare
Resilience and reduced vulnerability	Dependence on autonomous technology and dehumanization of war

Source: The table is a personal elaboration of the author Romina Gurashi.

One of the most emphasized potential advantages of Mosaic Warfare lies in its modular structure, which allows military planners to rapidly configure different combinations of resources and platforms in response to emerging threats (Magnuson, 2018). Through this capacity for adaptation and elasticity in redefining decision-making structures, the Mosaic Warfare paradigm profoundly revises traditional power relations – shifting from a rigid hierarchical model to a more distributed and dynamic model of military power.

The fragmentation of resources and the high decision-making speed offered by AI further expand the scale and typology of battlefields, making them increasingly complex and virtually boundless. This complexity makes it far more difficult for an enemy to anticipate the moves that a Mosaic Warfare force is about to deploy (Clark, Patt, Schramm, 2020), thereby creating a cognitive overload effect. An adversary’s command structures can become

disoriented under such conditions, which increases the likelihood of decision-making errors in their response.

Another notable advantage inherent in Mosaic Warfare is the possibility of using a large number of smaller, less expensive systems, thus reducing overall costs without compromising the effectiveness of military actions (DARPA, 2018). This aspect in effect democratizes the tools of warfare, since even less technologically advanced military powers could adopt similar swarming strategies. The flip side, however, is an increased risk of a proliferation of asymmetric conflicts, as a growing number of state and non-state actors would be in a position to exploit these modular tools for their own conflict purposes.

Mosaic Warfare's progressive disaggregation of command structures and relationships can, on one hand, reduce the risk of catastrophic losses by avoiding single critical points of failure – thereby ensuring greater resilience (Clark, Patt, Schramm, 2020). On the other hand, this very disaggregation introduces a layer of complexity that is increasingly unmanageable with human capabilities and expertise alone. It thus becomes self-evident that employing AI in this domain is no longer merely an innovation to enhance existing techniques, but rather an indispensable technological dependency for managing the system.

Several critical challenges emerge from this new paradigm which merit attention. One prominent issue is the management of multiple autonomous systems, a task that requires sophisticated coordination centered on the use of AI (Clark, Patt, Schramm, 2020). The complexity of synchronizing many semi-independent units introduces new vulnerabilities, primarily due to the possibility of systemic failures or unforeseen algorithmic errors. In a high-intensity war scenario, such failures or errors could lead to disastrous consequences on the battlefield.

The integration of systems from different developers poses another significant challenge (Mahmud, 2020). Disconnections or incompatibilities between diverse platforms could hinder military operations, while differences in communication protocols might compromise the effectiveness of the overall system. Furthermore, dependence on advanced digital networks increases vulnerability to electronic warfare attacks (Clark, Patt, Schramm, 2020). As the degree of systemic interconnection grows, so does the number of vulnerable nodes that an enemy could target (for example, through jamming) to disrupt the functioning of devices and command platforms.

Excessive trust in, and reliance on, autonomous systems brings with it the profound risk of dehumanizing warfare (Asaro, 2012). This unshakeable faith in technological progress and its supposedly salvific (all-solving)

capabilities – characteristic of a modern capitalist technocratic mindset (Mumford, 1967) – fosters the perception that AI solutions alone can resolve highly complex situations that would challenge human decision-makers. Such a perception paves the way for a reduction in the ethical and moral sensitivity of the military establishment when it habitually relies on a tool devoid of human elements like emotion and moral judgment. As a result, the loss of human life could increasingly be treated by AI-driven decision systems as a mere statistical variable, rather than as a violation of fundamental human rights or an affront to human dignity.

3. Vulnerabilities and ethical dilemmas

As previously discussed, while AI presents new operational capabilities and risks, it also raises profound questions regarding social vulnerability.

When discussing risk, we refer to the likelihood of a harmful event occurring. However, when addressing social vulnerability, we consider the capacity of a system or community to withstand, adapt to, or recover from such events (Beck, 1992). In other words, whereas risk studies focus on the probability of adverse occurrences, vulnerability studies analyze the structural conditions that expose a system to harm, making it less resilient to the negative consequences of those risks (Longo, Lorubbio, 2021).

Within the vast and evolving landscape of Mosaic Warfare, vulnerability does not arise solely from technological failures but also from social and cultural dynamics that shape the ability of individuals and military institutions to respond to threats effectively.

A primary source of vulnerability in this regard stems from AI's intrinsic dependence on data. By design, AI systems learn from the datasets they are trained on. If these training datasets are incomplete or embedded with historical biases, these distortions will inevitably be replicated within the decision-making processes of autonomous systems (O'Neil, 2016). This results in algorithmic discrimination (see Kleinberg *et al.*, 2018), which not only perpetuates existing social inequalities but also has the potential to generate new ones.

In military applications, such biases could lead to misidentification of ethnic or cultural groups as potential threats, or the prioritization of strategic targets based on flawed or biased datasets. This, in turn, increases the risk of human rights violations (Eubanks, 2018). These dynamics warrant thorough examination, as they raise fundamental ethical concerns – particularly regarding errors in judgment that, when made by autonomous AI systems,

could not only legitimize but actively perpetuate new forms of discrimination and structural violence (Noble, 2018).

The vulnerabilities associated with biased datasets are further compounded by AI's inherent lack of empathy, which represents one of the most critical limitations of its deployment in autonomous offensive systems. AI algorithms are incapable of interpreting moral or contextual nuances in human decision-making (Gunkel, 2018). Consequently, if designed without a deep understanding of social dynamics, AI-driven decisions could exacerbate existing inequalities. Moreover, automated decision-making processes, driven purely by quantitative metrics, could manifest as forms of invisible violence, such as denying access to strategically important resources.

This progressive dehumanization of conflict and of strategic decision-making in warfare risks ushering in an entirely new paradigm shift – one where war becomes a purely mechanical process, devoid of ethical or moral considerations.

This shift is enabled by a fundamental characteristic of AI: it lacks biological needs or emotions and is programmed solely to optimize predefined operational objectives. The fundamental divergence between traditional social actors (i.e., military personnel) and the new non-human actor represented by AI raises the risk of AI-driven strategies that do not align with fundamental human interests (Bostrom, 2014). In extreme cases, AI could make decisions that disregard core human values, such as respect for life and personal dignity.

For instance, an AI system designed to maximize military efficiency could determine that sacrificing human lives or destroying civilian infrastructure is the most optimal course of action, if such choices align with its predefined success parameters.

The vulnerabilities outlined thus far also compel us to reflect on another critical issue associated with AI in Mosaic Warfare: the risk of uncontrolled escalation.

Automation significantly accelerates decision-making processes, inevitably reducing opportunities for human intervention (Lin *et al.*, 2008). This dynamic could lead to erroneous threat responses, triggering uncontrollable chain reactions between multiple autonomous systems. In extreme cases, it could initiate unintended escalations, resulting in widespread destruction.

Additionally, from the perspective of conflict mediation, negotiation, and transformation, the speed at which AI operates introduces a fundamental challenge. If algorithms can reshape battlefield scenarios and power balances faster than human actors can process them, this could outpace traditional

diplomatic efforts, making wars not only harder to control but also more difficult to de-escalate and resolve.

Conclusions

This analysis has demonstrated how Mosaic Warfare is redefining the contemporary warfare paradigm, introducing a modular and adaptive logic that – while enhancing strategic effectiveness – simultaneously amplifies the complexity of command and control, increases dependence on autonomous systems, and elevates the risk of unpredictable failures.

At the heart of this transformation lies artificial intelligence, which accelerates decision-making processes, enhances predictive capabilities, and reshapes battlefield power dynamics. However, its deployment raises critical concerns: the delegation of decision-making to AI not only risks dehumanizing warfare but also introduces new vulnerabilities, ranging from algorithmic biases to the erosion of human oversight.

As war becomes increasingly digital, it transcends the physical battlefield, permeating the social fabric and widening the divide between technological advancement and governance. In this new reality, power is no longer measured solely in military strength but in the ability to manipulate data, shape perceptions, and orchestrate information warfare.

The future of war will be increasingly defined by a confrontation between algorithms and humanity. The greatest danger, however, lies in allowing technological innovation to outpace ethical reflection, turning conflict into an autonomous game controlled by machines – yet detached from human conscience and accountability.

References

- Asaro P. (2012). On banning autonomous weapon systems: human rights, automation, and the dehumanization of lethal decision-making. *International Review of the Red Cross*, 94(886): 687-709. <https://doi.org/10.1017/S1816383112000768>
- Barnett T.J., Jain S., Andra U., Khurana T. (2018). *Cisco Visual Networking Index (VNI) Complete Forecast, Update 2017-2022. Technical Report*. Americas/EMEAR Cisco Knowledge Network (CKN), Presentation 1.1.
- Beck U. (1992). *Risk society: towards a new modernity*. London-Thousand Oaks-New Delhi: SAGE Publications.
- Bostrom N. (2014). *Superintelligence: paths, dangers, strategies*. Oxford: Oxford University Press.
- Clark B. (2020). The emergence of decision-centric warfare. In Clark B., Patt D., Schramm H. (eds.), *Mosaic warfare: exploiting artificial intelligence and autonomous systems to*

implement decision-centric operations (pp. 17-32). Washington (DC): Center for Strategic and Budgetary Assessments.

Clark B., Patt D., Schramm H. (2020). *Mosaic warfare: exploiting artificial intelligence and autonomous systems to implement decision-centric operations*. Washington (DC): Center for Strategic and Budgetary Assessments.

D'Andrea F. (2005). Immaginare la macchina. La realtà simbolica del cyborg. In D'Andrea F. (ed.), *Il corpo a più dimensioni. Identità, consumo, comunicazione*. Milano: FrancoAngeli.

DARPA (2018). DARPA tiles together a vision of mosaic warfare. <https://www.darpa.mil/news/mosaic-warfare>

Docherty B.L. (2012). *Losing humanity: the case against killer robots*. Cambridge (MA): Human Rights Watch. <https://www.hrw.org/report/2012/11/19/losing-humanity/case-against-killer-robots>

Eubanks V. (2018). *Automating inequality: how high-tech tools profile, police, and punish the poor*. New York: St. Martin's Press.

Galetta G. (2024). L'utilizzo dell'IA come supporto decisionale in ambito militare: dal mission al network command fino ai sistemi AI DSS. *Digital Politics*, 2: 1-20. <https://doi.org/10.53227/115060>

Garcia D. (2024). Algorithms and decision-making in military artificial intelligence. *Global Society*, 38: 24-33.

Goldfarb A., Lindsay J.R. (2022). Prediction and judgment: why artificial intelligence increases the importance of humans in war. *International Security*, 46(3): 7-50.

Gunkel D.J. (2018). *Robot rights*. Cambridge (MA): MIT Press.

Horowitz M.C. (2016). The ethics & morality of robotic warfare: assessing the debate over autonomous weapons. *Daedalus*, 145(4): 25-36. https://doi.org/10.1162/DAED_a_00409

Jacobsen J.T., Liebetrau T. (2023). Artificial intelligence and military superiority. How the 'cyber-AI offensive-defensive arms race' affects the US vision of the fully integrated battlefield. In Cristiano F., Broeders D., Delerue F., Douzet F., Géry A. (eds.), *Artificial intelligence and international conflict in cyberspace* (pp. 135-156). London-New York: Routledge.

Kleinberg J., Ludwig J., Mullainathan S., Sunstein C.R. (2019). Discrimination in the age of algorithms. *Journal of Legal Analysis*, 10: 113-174. <https://doi.org/10.1093/jla/laz001>

Lin P., Bekey G., Abney K. (2008). *Autonomous military robotics: risk, ethics, and design*. California Polytechnic State University. https://www.ethics.calpoly.edu/ONR_report.pdf

Lockey S., Gillespie N., Curtis C. (2020). *Trust in artificial intelligence: Australian insights*. Queensland: The University of Queensland and KPMG.

Longo M., Lorubbio V. (2021). Vulnerabilità, rischio e diritti umani tra riflessione sociologica e diritto internazionale. *Rivista Trimestrale di Scienza dell'Amministrazione*, 1: 1-29. <https://doi.org/10.32049/RTSA.2021.3.09>

Magnuson S. (2018). DARPA pushes 'Mosaic Warfare' concept. *National Defense*, 103(780): 18-19.

Manhas S. (2023). Drone warfare – a gray area. *International Journal of Electrical, Electronics and Computers*, 8(5): 1-4. <https://doi.org/10.22161/eec.85.1>

Meyer K. (2024). *AI-driven unmanned aerial vehicles in modern warfare*. Ghent University, Faculty of Political and Social Science. https://libstore.ugent.be/fulltxt/RUG01/003/213/966/RUG01-003213966_2024_0001_AC.pdf

Morgan F.E., Boudreaux B., Lohn A.J., Ashby M., Curriden C., Klima K., Grossman D. (2020). *Military applications of artificial intelligence: ethical concerns in an uncertain world*. Santa Monica: RAND Corporation.

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Moskowitz H., Drnevich P., Ersoy O., Altinkemer K., Chaturvedi A. (2011). Using real-time decision tools to improve distributed decision-making capabilities in high-magnitude crisis situations. *Decision Sciences*, 42(2): 477-493.

Mumford L. (1967). *The myth of the machine: technics and human development*. New York: Harcourt Brace Jovanovich.

Noble S.U. (2018). *Algorithms of oppression: how search engines reinforce racism*. New York: NYU Press.

O'Neil C. (2016). *Weapons of math destruction: how big data increases inequality and threatens democracy*. New York: Crown Publishing Group.

OECD (2019). *Artificial intelligence on society*. Paris: OECD Publishing.

Oliveros-Aya C. (2023). Artificial intelligence in drones and robots for war purposes: a bio-legal problem. *JANUS NET e-journal of International Relations*, 14(2): 1-10. <https://doi.org/10.26619/1647-7251.14.2.5>

Singer P.W. (2014). *Wired for war: the robotics revolution and conflict in the 21st century*. London: Penguin Books.

Sabry F. (2021). *Armi autonome. In che modo l'intelligenza artificiale prenderà il sopravvento sulla corsa agli armamenti*. Abu Dhabi: 1BK One Billion Knowledgeable.