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Research Paper

Increasing Significance of Artificial Intelligence in War – Thematic Analysis of Selected News Articles

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Abstract: *The study investigates the portrayal of artificial intelligence in warfare through selected news articles, employing thematic analysis to identify and report patterns within the data. The objectives include exploring the representation of AI through the frameworks of theory of netocracy, as articulated by Bard and Jan Söderqvist. Ten distinct themes emerged from the analysis, highlighting the unique contribution of this research in addressing the underrepresentation of AI's role in conflict within media narratives. Unlike previous studies, this research emphasizes the significance of news as a cultural product, suggesting that its production process can be examined through various power dynamics—cultural, economic, and political-economic. This perspective provides valuable insights into societal understanding of AI in the context of warfare, marking a novel approach in the discourse surrounding technology and conflict.*

Keywords*: Artificial Intelligence, media representation, netocracy, AI and conflict, thematic analysis.*

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I. INTRODUCTION

The role of Artificial Intelligence (AI) in fighting wars was predicted much earlier when the countries started investing in automated weapons and intelligence maintaining systems [1]. The groundbreaking strategies of the western companies have a major part to play; that even giants like US and China are competing on AI enabled military systems [2]. From home gadgets and self-driving cars to execution in warfare, AI has become a topic of growing interest for researchers. One of the studies on expansion of AI in worldwide military capabilities suggests that the nations are leveraging AI to maintain their competitiveness. Nations failing to come together to establish human control over welfare would lead to an AI cold war [3]. Discussing the global influence of the competition between US-China, another research concluded that implementing AI enabled weapons could be pivotal for China's aspirations of becoming a world-class military [4]. The legal, ethical and strategic concerns regarding autonomous weapons and international laws are raised, even though AI enhances situational awareness and decision making [5]. Almost all the studies done on AI and warfare have raised concerns on legal and ethical implications. The challenges in existing legal frameworks and the need for accountability in international human rights laws for using robots in war are also explored [6]. Research highlights the challenges in holding accountability for programmers, army commanders and the potential loopholes of killer robots responsible for war crimes [7]. This brings us to the need for regulations surrounding autonomous weapon systems and deployment.

Studies also suggest that there is a need for proactive regulations and ethical guidelines to manage the challenges, for which AI education has become the need of the hour [8]. It is to be noted that chatbots like chatgpt are banned in heavy internet censorship countries like North Korea, Russia, Iran and China [9]. However, their language processing capabilities are still made use in military operations like target recognition and logistics [10]. From this, one can conclude that despite advantages, AI could be a threat to modern warfare due to its ethical, legal and other challenges impacting society. The studies also stress on the need and the importance of regulations and guidelines in the arena of AI warfare. What makes the present study stand out is that the AI's role in conflict is explored through its coverage in the media. Previous research done to bridge the gap between AI and media representations in the context of conflict were only partially successful. Therefore, the entire study is based on the argument that news reporting's role in monitoring AI's impact is crucial in understanding how it changes society [11]. For this, understanding the previous studies on media representations

on AI becomes essential. Attempting to explore how news outlets frame AI, 4 themes; AI and politics, economics, research/science and society/culture were identified [ibid]. Another study concluded that the media has realistic and practical focus in its coverage of AI and ethics; and that the news articles on AI and ethics were written with insufficient knowledge of technology or ethics [12]. A sentiment analysis of 12,000 articles revealed that the coverage of AI does not support negative bias against AI, and that few negative articles reporting on real events were not trying to scare people [13]. AI in general is depicted as a blend of imperfect entertainment and fear [14]. Research has been carried out on the intersection of media and deepfakes, addressing its challenges [15] Studies on AI based news production and distribution can also be seen in arenas of immersive journalism, drone journalism [16][17] and data journalism [18]. However, portrayal of AI in conflict reporting is still in its emerging stages.

II. METHODOLOGY

The Objectives of the study viz: i. To investigate how AI in warfare is portrayed in selected news articles; and ii. To explore the portrayal of AI through the lens of netocracy by Bard and Jan Söderqvist. A comprehensive search was conducted on online news platforms, focusing on articles related to AI's role in conflict and warfare. News can be viewed as a commodity, and its production process can be examined through the lens of cultural, economic, political-economic, or other power dynamics [19]. Key themes related to AI's portrayal in warfare and its alignment with the theories of technological determinism and netocracy were identified. Interpretation of the data was conducted to uncover insights into the portrayal of AI in warfare and its implications in the context of netocracy, offering insights into various themes that shed light on AI's evolving role in warfare. A comprehensive search on various online news platforms was done to gather relevant articles. The search focused on articles that discussed AI's role in conflict and warfare, as these topics were central to the study's objectives. The selected articles were then subjected to thematic analysis, a method that involves identifying and analyzing themes within qualitative data. This approach allowed us to uncover patterns and insights related to the portrayal of AI in warfare and its alignment with the theory of netocracy.

III. ANALYSIS

3.1 AI in Target Selection and Facial Recognition

AI actsas a significant tool in selecting targets, particularly in the Israeli Defence Force in the ongoing Israel-Hamas war. The deployment of an AI target-creation platform named 'the Gospel' has been highlighted in the news articles to accelerate the production of targets indicating a shift towards more automated and rapid decision-making in identifying potential targets. It is also mentioned that integrating AI-based systems into the IDF's operations has notably expedited the target creation process, as indicated by sources familiar with these tools. Another news article mentioned that the AI system, 'Gospel' is utilized to identify enemy combatants and equipment in real-time, aiding in the reduction of civilian casualties. Another article emphasizes the value of AI, with a focus on facial recognition technology, during crises. It portrays use of Clearview AI, as a crucial tool in facial recognition technology. Using it in crisis environments is highlighted as a life-saving measure in war zones. This underscores the significance of AI in providing critical support during an ongoing war. This recognition of AI's importance in crisis management underscores its effectiveness and impact in challenging situations.

3.2 AI as a Tool

3.2.1 Tool for propaganda: The articles suggest that the vivid illustrations of lifelike images of carnage were generated during the Israel-Hamas war. These deceiving images are viewed millions of times online and are utilized to manipulate visuals to evoke specific emotional responses. This demonstrates AI's potential as a propaganda tool that is capable of directing their efforts towards individuals' most profound impulses and anxieties.

3.2.2 Strategic Tool: The portrayal of AI as a strategic tool in modern warfare was predominantly found in the articles. The tech giant Palantir Technology uses AI-powered software for Ukraine to analyze Satellite imagery, publicly available data, footages from drones, and ground reports to present commanders with military options. This is considered responsible for most of the targeting by Ukraine. Another article mentions that the company used the war situation in Ukraine as an opportunity to expand its business. Due to the government's desperate need for a war strategy, Palantir began to market the battlefields of Ukraine as the latest military tech laboratories. It was eager to demonstrate its capabilities, offering them to Ukraine at no cost. With Palantir being described as 'the 21st century's AI arms dealer,' the significant role of AI in providing military capabilities and intelligence analysis is revealed. It emphasizes that superior AI capabilities can provide a significant advantage by enabling the prediction of enemy actions in advance, potentially minutes or hours before they occur. Though such a proactive approach, the critical role of AI in military preparedness and decision-making is known.

3.2.3 Valuable tool: Portrayal of AI, specifically facial recognition technology, as a valuable tool was also found. The article highlighted how AI, such as Clearview's tool, can be instrumental in identifying suspects, spies, and deceased individuals during wartime. The article quoted the CEO of Clearview emphasizing the importance of such technology in providing clarity and verification of identities in complex situations like war.

3.3 Analytical Capabilities and Big Data

The importance of converting massive data into actionable information without overwhelming systems is highlighted in the news articles. This integration of AI with Big Data is essential for handling decentralized systems effectively, showcasing the pivotal role of data processing in AI applications. One of the articles emphasizes AI's analytical prowess in handling vast amounts of data swiftly. It mentions how AI technology can crunch months of work into minutes, enabling machines to analyze public sentiments and identify emerging threats to peace processes. This showcases AI's ability to process information at a speed and scale that surpasses human capacity, making it a valuable asset in conflict resolution scenarios where quick and accurate analysis is crucial. AI's crucial role in Israel's military operations in Gaza is relied upon to map out the battle space and inform tactical responses. This reliance on AI is seen in Israel's quest to eliminate Hamas following a deadly attack, showcasing the integration of AI into military strategies.

3.4 Warfare and Decision-making

AI's use has surged with advanced generative technologies like OpenAI's, ChatGPT and Google's Bard. Articles highlight AI's role in modern weapons like drones and emphasize the distinction between autonomy and intelligence. AI mimics human intellect, enabling tasks like speech recognition and decision-making. In warfare, AI enhances military capabilities by analyzing data, identifying patterns, and offering predictive insights. The complexity of modern warfare increases with AI integration, reshaping strategies with robotics and intelligent munitions. AI-based decision support systems aid human decision-making in war, addressing human cognitive limitations and interactions with machines. The articles mention AI-based decision support systems that aid human decision-making in war, highlighting AI-DSS (AI Decision Support Systems) as computerized tools that utilize AI software by displaying, synthesizing, analyzing data, and providing recommendations. How these systems play a crucial role in influencing human decisions, considering human cognitive limitations and interactions with machines is being portrayed in the articles.

3.5 Role of AI-Generated Images and Deepfakes

The articles highlight the democratization of access to sophisticated audio and video manipulation technology as a significant concern. It quotes Farid from the University of California that the ease with which individuals, even those with limited technical expertise, can now create fake content using AI tools is problematic. Another article elaborates on three aspects of deepfake: creation, research, and negative influence. It describes AI as a tool used to create deepfake videos, which are fabricated to deceive viewers into believing in events that never happened. These videos are designed to appear realistic and are often crafted to mimic real individuals. Then, the research led by Twomey and his team on posts discussing deepfakes on social media platforms was reported. The impact of deepfakes on public perception is presented by highlighting a trend where deepfakesfueled unhealthy skepticism during the war, leading to a loss of trust in the authenticity of media content. One of the articles describes AI as a crucial component and points out that the Kremlin (Russia) utilizes deep fakes to fabricate media through a form of machine learning known as 'deep learning.' Thus the coverage insists that such technology can generate highly realistic and deceiving images, audio, and videos.

3.6 Misinformation and Amplifying Disinformation

How the integration of AI amplifies the spread of misinformation and disinformation online is emphasized. The article reports the words of Gualtieri who points out that the internet has already facilitated the rapid dissemination of false information. However, with the incorporation of AI, the advantage for those propagating disinformation becomes significantly greater. Furthermore, another article mentions that lawmakers in Washington are concerned about the risk posed by AI and social media in spreading misinformation to U.S. voters. This apprehension reflects the broader societal impact of AI on democratic processes and the urgent need for measures to counter the dissemination of false information. In the context of the Sudan conflict, the AI was portrayed as a tool that can be misused for spreading misinformation and creating confusion. The democratization of sophisticated audio and video manipulation technology is highlighted as a concerning factor. This accessibility allows individuals, even those with limited technical expertise, to easily create fake content. The article reported that the use of AI voice software, as seen in the case of impersonating the former leader of Sudan, demonstrates the potential dangers of fake audio and video content.

3.7 AI in Weapon Development Systems

In the context of ground testing in conflict zones, one article highlights Israel's use of Gaza and the occupied territories as experimental arenas for testing AI-guided weapons and combat devices. By employing these regions as 'testing grounds' for robotic and AI-enhanced systems, Israel seeks to refine military strategies and evaluate high-tech weapons' effectiveness in real-world scenarios. Discussing AI's transformative power, another article quotes former Google CEO Eric Schmidt, who draws a parallel between AI systems and the impact of nuclear weapons before World War II. Schmidt emphasizes AI's transformative potential, likening it to the game-changing nature of nuclear weapons in altering warfare dynamics. He suggests that AI-powered autonomy and decentralized systems possess immense power, similar to the revolutionary impact of nuclear technology. Another article highlights both sides' rush to deploy unmanned machines leveraging AI for autonomous operations, encompassing a wide range of military assets, from submarines to ground combat vehicles. The focus on developing 'killer robots' underscores AI's growing significance in modern warfare strategies. Exploring AI applications for future weapon systems, advancements in AI technologies are depicted as driving arms industries to create more precise, lethal, and autonomous weapons. This trend signifies a shift towards integrating AI at various levels of naval warfare, from anti-submarine operations to fleet tactics, significantly enhancing operational capabilities. Additionally, the article emphasizes that while modern weapons, including drones, rely on AI, not all AI forms are autonomous, distinguishing between autonomy and intelligence in weapon systems. Furthermore, the article presents contemporary Lethal Autonomous Weapons Systems (LAWS) as the 'natural evolutionary path' of warfare. The article draws parallels between traditional smart weapons and single drones, emphasizing that drone swarms represent a new and potent form of weaponry. This evolution underscores the increasing integration of AI technologies in weapon strategies.

3.8 AI in Moderation and Conflict Resolution

The articles highlight the role of AI in content moderation, emphasizing its capability to remove harmful and illegal content at scale. However, when it comes to moderating violent images from wars, machines lack the nuanced understanding required to identify human rights violations. This limitation highlighted a challenge faced by Zakharenko, a travel journalist who documented attacks on Ukrainians. Another article portrays AI as a transformative force in the realm of peace and mediation. It highlights how groundbreaking technological advancements are revolutionizing the frontier of peace and mediation, indicating a significant shift toward leveraging AI for conflict resolution. This is evident in the statement that we are witnessing an era where AI transforms mediators into powerhouses of efficiency and insight. AI is seen as a tool that enhances the capabilities of mediators, enabling them to operate more effectively and gain deeper insights into complex situations.

3.9 Ethical Implications and Challenges

The articles express concerns about integrating AI into military operations, particularly regarding risks to civilians. As advanced militaries adopt complex automated systems like AI, there is growing apprehension about the potential impact on civilian populations. AI's use in warfare introduces complexities and opacity that heighten worries about civilian safety and ethical implications of automated decision-making processes. Ethical dimensions of employing AI in warfare, particularly in Israel's occupation of Palestinians, were highlighted. Mhajne, a political science academician, emphasizes the link between Israel's AI advancements and occupation policies, raising ethical questions about technology's role in perpetuating violence. There's a trade-off between speed in AI-facilitated decision-making and adherence to moral and legal obligations, with concerns that prioritizing speed may overshadow ethical considerations. AI's development by biased engineers raises concerns about reinforcing social prejudices and discrimination. Authenticating information and ensuring a shared basis of evidence are crucial in conflict resolution processes to prevent mediation obstacles. The context of social unrest, like the ongoing crisis in Sudan, underscores the importance of caution when dealing with AI's capabilities of mimicking voices. Envisioning a future battlefield characterized by hyperactivity of AI-enabled systems, highlights AI's role in shaping the battlefield environment and necessitates adaptive strategies to counter emerging threats.

3.10 Future Advancements

One article emphasizes the rapid technological advances in AI, highlighting the potential for AI to become a weapon in future conflicts, elections, and significant events. This underscores the need for vigilance in understanding and regulating AI's use in such contexts. Another article suggests that facial recognition technology like Clearview AI will play a significant role in future conflicts, raising questions about AI's evolving role in mitigating conflict impacts and addressing warfare challenges. AI is consistently defined as a modern approach to handling complex next-generation warfare in most articles, with its adaptation level emphasized as crucial in determining future war courses. It is portrayed as a key component in navigating advanced warfare scenarios, providing a strategic edge to naval powers. Additionally, AI is depicted as the

'dominant force' shaping the future of warfare, signaling a significant shift towards AI-dominated conflicts and crucial transitions in military strategies. Its emergence as a pivotal element in warfare is portrayed as defining the upcoming conflict landscape in several articles. In the context of drone warfare, AI holds immense promise for Ukraine's military, offering significant potential for innovation. However, there's acknowledgment of the dual nature of this technology, as it may be exploited by nefarious non-state actors. AI technology in drones is seen as catalyzing innovative leaps in Kyiv's domestic drone market, democratizing unmanned warfare's lethality and proving crucial for Ukraine's military in facing more powerful adversaries. Moreover, the article recognizes the advancements made by Ukraine in drone technology, like AI softwares and UAVs (Unmanned Aerial Vehicle) that operate without GPS.

IV. THEORETICAL FRAMEWORK

From the themes derived from the news articles, the narrative that AI represents the future of warfare is found. Technological determinism argues that technology plays a significant role in shaping societies and human behavior. This deterministic view suggests that technological advancements have the power to shape the course of human history. In the context of AI's role in conflict, technological determinism is used to highlight how the evolution of AI technologies impacts military strategies, decision-making processes, and the dynamics of warfare. As technology advances, it not only transforms the nature of conflicts but also influences how power is contested in the digital age. It is from here that the concept of technological determinism intertwines with netocracy [20]. The theory of netocracy is based on the idea that the 'netocrats,' or the new elites who gain influence through digital networks and knowledge rather than traditional wealth will redefine power structures in the information age, through connections and knowledge over financial status [21] [22]. Due to its expertise in managing information, the netocracy is poised to assert dominance in the forthcoming information society [23].

Few years ago, Elon Musk, along with Hawking and other prominent figures warned about the potential threat of AI in warfare [24]. However, Musk's AI-enabled SpaceX technologies are now involved in military applications. SpaceX, with its advanced AI technologies, holds a significant position in defense industries, exerting influence over military technologies and strategies. His discussions with the Israeli military on his company's use of AI [25] highlights that the power is held by those who control information networks. From the themes identified, AI systems like 'the Gospel' in Israel-Hamas war, stimulated target creation processes, corresponding with the netocracy's emphasis on power dynamics within networked societies. Here the AI acts as a tool for strategic advantage and efficiency in military operations. The theory of netocracy also aligns with the portrayal of tech giants like Palantir as key players in providing AI-driven solutions to military conflicts. The articles also illustrated propaganda purposes of AI in manipulating emotions and perceptions, resonating with the netocracy theory's focus on information control and manipulation within digital networks. Thus, the AI's significant influence and power, leveraging to shape military strategies and decision-making processes and with Schmidt's comparison of AI systems with impact of nuclear weapons, AI-powered autonomy and decentralized systems can be seen as revolutionary. Additionally, the depiction of AI as a force multiplier in warfare, operational efficiency, predictive analytics, data-driven decision-making, and real-time intelligence, reinforces the notion of a digital elite driving the evolution of modern warfare, underscoring the theory of netocracy.

V. CONCLUSION

The Study focused on exploring how the media portrays AI's role in conflict. Drawing observations from previous studies, it was identified that the research done on media portrayal of AI in warfare was inadequate. From analyzing the selected news articles, ten themes were identified. The advancement of AI in conflict was found to be aligning with the theory of netocracy. A critical perspective that merits consideration is the notion that data and technology are increasingly in the hands of imperialist powers. This view suggests that the netocratic elites controlling AI systems in warfare are often aligned with dominant global powers, using these technologies to maintain and expand their influence. The media's portrayal of AI in conflict may, therefore, reflect and reinforce these imperialist agendas, further concentrating power in the hands of a select few. The study also admits limitations in terms of datasets and recommends more research is needed to generalize the existence of netocracy in conflict news pertaining to AI. Also, the study limits its potential to explore only the representation of the role of AI in conflict in news coverage. How AI dominates newsrooms in conflict reporting and the role of automated journalism in war zones are beyond the scope of this research.

REFERENCES

[1]. Biswas, S. (2023). Prospective role of chat GPT in the military: According to chatgpt. Qeios.
[2]. Browne, R. (2023, April 4). Italy became the first Western country to ban ChatGPT. Here's what other countries are doing. CNBC. https://www.cnbc.com/2023/04/04/italy-has-banned-chatgpt-heres-what-other-countries-are-doing.html.
[3]. Buckland, M. (2006). Netocracy. Memeburn. Retrieved fromhttps://memeburn.com/2006/02/netocracy/

[4]. Capitalism versus netocracy. Chilowicz. (n.d.). https://www.chilowicz.nl/capnet.htm
[5]. Duffy, C., &Maruf, R. (2023, April 18). Elon Musk warns Ai could cause "civilization destruction" even as he invests in it | CNN business. CNN.https://www.cnn.com/2023/04/17/tech/elon-musk-ai-warning-tucker-carlson/index.html
[6]. Epstein, L. (2015, April). Wanted: Collaborative intelligence. Artificial Intelligence, 221, 36–45.
[7]. Fatikhova, D., Ostroumov, A., &Ostroumova, O. (2023). Netocracy as a Subject of the Modern Information Society. RelaçõesInternacionais no MundoAtual, 2(40), 156-155.
[8]. Garvey, C., &Maskal, C. (2020). Sentiment Analysis of the News Media on Artificial Intelligence Does Not Support Claims of Negative Bias Against Artificial Intelligence. OMICS:A Journal of Integrative Biology, 24(5).https://doi.org/10.1089/omi.2019.0078.
[9]. Harvard, J. (2020). Post-Hype Uses of Drones in News Reporting: Revealing the Site and Presenting Scope. Media and Communication, 8, 85–92.
[10]. Hermida, A., & Young, M. L. (2019). Data Journalism and the Regeneration of News (1st ed.). London: Routledge.
[11]. Humble, K. (2023). Artificial intelligence, international law and the race for killer robots in modern warfare. Artificial intelligence, social harms and human rights (pp. 57-76).
[12]. Kang, S., O'Brien, E., Villarreal, A., Lee, W., &Mahood, C. (2019). Immersive Journalism and Telepresence. Digital Journalism, 7, 294–313.
[13]. Kaplan, A., &Haenlein, M. (2020). Rulers of the world, unite! The challenges and opportunities of artificial intelligence. Business Horizons, 63(1), 37-50.https://doi.org/10.1016/j.bushor.2019.09.003.
[14]. Kania, E. B. (2020). 'AI Weapons' in China's Military Innovation. Brookings Institution. Retrieved fromhttps://www.brookings.edu/wpcontent/uploads/2020/04/FP_20200427_ai_weapons_kania_v2.pdf
[15]. Karnouskos, S. (2020, September). Artificial Intelligence in Digital Media: The Era of Deepfakes. IEEE Transactions on Technology and Society, 1(3), 138-147.https://doi.org/10.1109/TTS.2020.3001312
[16]. Ken Klippenstein. (2023, December). Elon Musk discussed AI with Israeli military as it uses AI to Bomb Gaza. Elon Musk Discussed AI With Israeli Military as It Uses AI to Bomb Gaza.https://www.kenklippenstein.com/p/elon-musk-discussed-ai-with-israeli
[17]. Khan, A., Khan, A. S., & Khan, I. (2022). Responsibility Of Killer Robots For Causing Civilian Harm: A Critique Of Ai Application In Warfare Doctrine. Pakistan Journal of International Affairs, 5(1).https://doi.org/10.52337/pjia.v5i1.398
[18]. Nguyen, D., &Hekman, E. (2022). The news framing of artificial intelligence: a critical exploration of how media discourses make sense of automation. Ai & Society, 1-15.
[19]. Olckers, A. (2020, March 7). AI in War: Algorithms Will Fight Each Other in 20 Years. Medium.https://medium.com/swlh/ai-in-war-algorithms-will-fight-each-other-in-20-years-4df66b346826
[20]. Ouchchy, L., Coin, A., &Dubljević, V. (2020). AI in the headlines: the portrayal of the ethical issues of artificial intelligence in the media. AI & SOCIETY, 35, 927-936.
[21]. Schudson, M. (1989, July). The sociology of news production. Media, Culture & Society, 11(3), 263–282.
[22]. Shahzad, K., Anwar, A., &Waqas, A. (2023). The Impact of Artificial Intelligence on Future Warfare and Its Implications for International Security. Asian Innovative Journal of Social Sciences and Humanities, 7(3).
[23]. Sobon, R. (2022). AI & Arms Control: The Cold War Continued. Law School Student Scholarship, 1248. Retrieved fromhttps://scholarship.shu.edu/student_scholarship/1248
[24]. The Economist Newspaper. (n.d.). Artificial Intelligence and war. The Economist.https://www.economist.com/leaders/2019/09/05/artificial-intelligence-and-war
[25]. Tonar, R. (2018, August 18). A.I. and technological determinism: Will A.I. Medium.https://remingtontonar.medium.com/a-i-and-technological-determinism-will-a-i-c294a12abc0a