#### DOI https://doi.org/10.30525/978-9934-26-520-4-10

## MILITARY LEXICON COINAGE THROUGH TECHNOLOGY ADVANCEMENT

# УТВОРЕННЯ НОВОЇ ВІЙСЬКОВОЇ ЛЕКСИКИ ЗАВДЯКИ РОЗВИТКУ ТЕХНОЛОГІЙ

#### Vasylenko D. V.

Candidate of Philological Sciences, Associate Professor, Associate Professor at the Department of English Phonetics, Spoken and Written English, Kyiv National Linguistic University Kyiv, Ukraine

#### Moryakina I. A.

Candidate of Philological Sciences, Associate Professor, Associate Professor at the Department of English Phonetics,Spoken and Written English, Kyiv National Linguistic University Kviv, Ukraine

#### Василенко Д. В.

кандидат філологічних наук, доцент, доцент кафедри фонетики і практики англійської мови Київський національний лінгвістичний університет м. Київ, Україна

#### Морякіна І. А.

кандидат філологічних наук, доцент, доцент кафедри фонетики і практики англійської мови Київський національний лінгвістичний університет м. Київ, Україна

The beginning of the 21st century in the USA was marked by the entry of the country's armed forces into a step-by-step process of significant transformations, which was called the "Revolution in Military Affairs" (RMA) [1], which manifested itself in the creation of military-technological and managerial prerequisites for the transition to the next generation of warfare. (RMA) became one of the factors that determined certain semantic and word-formation processes in the realm of English-speaking military lexicon, which require a special sociolinguistic analysis. The research factual data are summerized in the dictionaries and mass media [2, 4, 5, 6]. The aim of this paper is to establish correlations between the revolutionary changes and the innovations' enrichment in the military conceptual domain. Military analysts single out the following elements of modern defense systems, which form "a system of systems": ISR (Intelligence, Surveillance, Reconnaissance), C41 (Command, Control, Computer Applications, Communications, Intelligence Processing), Precision Force. [3, p. 48]. Newly coined abbreviations denote the components of the "system of systems": 1) ISR: AWACS (Airborne Warning and Control System), RIVET JOINT

(an airborne signals intelligence gathering aircraft), JSTARS (Joint Surveillance Target Attack Radar), ATARS (Advanced Tactical Airborne Reconnaissance System), MTI (Moving Target Indicator Radar), REMBAS (Remotely Monitored Battlefield Sensor System);2) C4I: GCCS (Global Command and Control System), DISN (Defense Information System Network), TRAP (Tactical Receiver Equipment and Related Applications), JWICS (Joint Worldwide Intelligence Communications System), SONET (Synchronous Optical Network), SABER (Surface Analysis Branch Exploitation and Reporting); 3) Precision Force: SFW (Sensor Fused Weapon), TLAM (BLK III) (Tomahawk Land Attack Missile (Block III)), ATACMS (an all-weather tactical missile), SLAM (Stand-off Land Attack Missile), HARM (High Speed Anti-Radiation Missile), SADARM (Sense and Destroy Armor), HELLFIRE II (a short-range laser guided missile), THAAD (Theatre High Altitude Area Defense).

Neologisms reflect innovative processes associated with various areas of novel military development. Thus, at the beginning of the 21st century, new scientific and technological inventions made a major breakthrough in different walks of life where militarization wasn't the exception. Special unit of the US military forces Space Command is responsible for the use of satellites, intended for surveillance, communication, global positioning system GPS (Global Positioning System), missile guidance and launching, anti-missile defense NMD (National Missile Defense), which is a new version of unimplemented SDI (Strategic Defense Initiative) aka the Star Wars Program. In the official US Quadrennial Defense Review, the improvement of combat space systems is one of the six priority goals of the transformation of the American armed forces. "DoD is committed to developing and employing all weapon systems, including those with autonomous features and functions, in a responsible and lawful manner," said Deputy Secretary of Defense Dr. Kathleen Hicks. "Given the dramatic advances in technology happening all around us, the update to our Autonomy in Weapon Systems directive will help ensure we remain the global leader of not only developing and deploying new systems, but also safety." [6]. It is believed that the main types of autonomous weapon and space systems will be combat "guard satellites" "escort satellites", "antisatellite weapons using kinetic energy" "anti-satellite weapons (ASATs)", "direct energy weapons", "space laser devices" "space laser-guided vehicles", "space-based microwave weapons", "unmanned orbital space vehicles", "space mines", "autonomous robots" under Replicator Initiative program which seeks to develop thousands of autonomous weapon systems for all branches of the military within two years' time . Innovations Orbital Space Vehicle. Common Aerospace Vehicle mark the most important tools of "space wars" – "star wars" transatmospheric aircraft (orbital spacecraft

and air-spacegeneral purpose ships). A significant role is assigned to reconnaissance satellites, such as **KH** ("**Key Hole**") .Innovations that are thematically related to the military space industry are concentrated around words such as space satellite: space asset, space capability, space control, space defense, space force application, space forces, space power, space sensor, space superiority, space systems, space traffic control, space monitors; SATNAV (satellite navigation), satellite guidance, satellite surveillance, tactical communications satellite (TCS), image intelligence satellite (IMINT), global-positioning satellite (GPS): «Similar in weight to its counterpart, GBU-38 finds its target using GPS coordinates and satellite guidance» [Time, June 19, 2006].

Today, the military is exploring new ways to use AI to help improve effectiveness and efficiecy, including its use in warefare. The transformation of the modern digitized battlefield is a rapidly evolving process which is urgently essential to unlock superiority .Today, AI systems are being employed to help detect and identify signals of interest and to implement the appropriate technology to jam the signal or intercept the threat as needed. Future generation s of fighter jets, submarines, and other military vehicles, currently on the drawn board, are likely to operate with a swarm of unmanned vehicles. AI will be used to control the swarm of unmanned aerial vehicles( UAVs) while the pilot focuses on executing his mission .Military forces around the world are experimenting with the emerging technology as engineers work to mature artificial intelligence technology and its integration with various platforms. Swarm technology will likely be incorporated into the next generation of fighter jets being developed today so that the autonomous crafts will coordinate seamlessly with their manned transcription and translation counterparts.The quality of AI-based programs improves dramatically with each software update. For instance, it can allow audio communications to be transcribed and translated in real time. [7] Vocabulary, which correlates with one of the most promising areas of development, has been significantly expanded American aviation fleet with unmanned aerial vehicles (UAVs): "Predator", "Pioneer," "Hunter"," Global Hawk", "Darkstar". The neologism Unmanned Combat Air Vehicle (UCAV) denotes the latest hypersonic unmanned attack aircraft. Another promising direction of (UAV) development reflects lexical innovation ornithopter, radio-controlled airplane with movable wings. Experts note that unmanned aerial vehicles will become one of the main tools of contactless warfare of the nearest future. Hypersonic drones like the Hermeus Darkhorse to transformative exoskeleton suits, the cutting-edge Hunter 2S drone system, the stealthy Manta-Ray UUV and the stealthy ADAPTIV Camouflage, we're delving into technologies that sound straight out of a sci-fi saga. Yet, the evolution of warfare is very real, and it's unfolding right before us. [8] The militarization of AI has profound implications for global security and warfare. AI can improve military capabilities by allowing quicker decision-making, more accurate targeting, and more efficient resource allocation. AI-powered autonomous weapons can operate without human intervention, potentially reducing the danger to human soldiers. [9]

The incessant technological progress and further *AI-based* integration in the military will drastically change the theatre and tactics of future wars which will likewise affect vocabulary enrichment.

### **Bibliography:**

1. Schneider, B. R., & Grinter, L. E. Battlefield of the Future: 21st Century Warfare Issues. University Press of the Pacific. United States. Joint Chiefs of Staff. 2021. 289 p.

2. Bowyer, R. Campaign. Dictionary of Military Terms. Third edition. Macmillan, Bloomsbury, 2004. 280 p.

3. Owens W. High Seas. Annapolis. Naval Institute Press.1995. 184 p.

4. Department of Defense dictionary of military and associated terms. Joint Chiefs of Staff. 2017. 394p.

5. DoD Directive 3000.0 "Autonomy in Weapon Systems" January 25, 2023. URL: https://www.esd.whs.mil/portals/54/documents/dd/issuances/ dodd/300009p.pdf

6. U.S. Department of Defense . DoD Announces Update to DoD Directive 300.09, 'Autonomy In Weapon Systems' Jan.25, 2023. URL: https://www.defense.gov/News/Releases/Release/Article/3278076/dod-announces-update-to-dod-directive-300009-autonomy-in-weapon-systems/

7. Artificial Intelligence in Electronic Warefare. URL: https://www.te.com/en/ industries/defense-military/insights/ai-in-warfare-and-militaryapplications.html

8. No Manning Required Ship (NOMARS) Program to Build, Test, Demonstrate First Ship. Aug 22, 2022. URL: https://www.darpa.mil/news/2022/nomars

9. Tshilidzi, M. Militarisation of AI has severe implications for global security and warfare. July18, 2023. URL: https://www.dailymaverick.co.za/opinionista/2023-07-18-militarisation-of-ai-has-severe-implications-for-global-security-and-warfare/