

Providing of the International Security: Future War and the Environment state

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Abstract: Globalization caused by the complex development path of mankind connecting and justifying the trend with different fields creates complex questions. The innovations of artificial intelligence connected by the future wars and by the perspectives of technological development for military applications. Its impacts on international security in global and environmental ways have to be analyzed from a geostrategic perspective by getting in base the idea about the unity of the earth and all processes in it. *The research aim* was the study of the geopolitical parameters impact on global geopolitical processes and international relations that related to technological development in XXI century as well as their impact in the environment. The comparative method, retrospective, empiricist, and forecasting methods were used in the study to answer the question of what is the impact of political globalization on the world processes both in political and environmental ways. We have analyzed how artificial intelligence is different from other technologies were considered and what is its impact on global environmental processes. At which level are the applications and the proven capabilities of artificial intelligence technologies and what is their influence on security in the global war-stop effect and the environment protection way? These should be considered in connection with the military strategy of the global power centers as well as the aims of imperialism. These have to be considered in connection with the impact on ecological and Earth wellness for future living. The difficulties based on leading to the development of neo-imperialism and created for international security in the future war are analyzed at factological justifications. The contradictions between the limitation of the geographical environment and the expansion of human society (covering the Earth) differ with its intensity, scale is global in nature. At present, not so well comprehended aspects of the dangers related to the future posed by artificial intelligence are explained in international security issues. And has to be noted, globalization has a significant influence not only on world safety because of neo-imperialism building but on the environmental state because the Earth is our common home and its safety is humanity alive.

Keywords: artificial intelligence, war, neo-imperialism, international security, impact.

Introduction

Wider application of the latest progress to technology in artificial intelligence indicates to influence deterministically and potential transformative to military power, strategic competition and world politics. Recently, the relevance of this theme provides the much-needed specificity of the discussion, especially because of its significant impact on the precarious environmental balance in our common home - the Earth (Newell, 2013; Alen and Chan, 2017).

The natural environment, which provides the basis for the physical existence of a person, and its protection is one of the conditions that affect the economic development and well-being of every country. So that the green economic paradigms (network of values) expressing the importance of air, water, and greens in the ecological health of humanity contain the ideas that protect the basic life rights of all creatures in nature with us, thinking about the ecosystem and the generations after us (Newell, 2013; Suki et al., 2022). In the world uncertainty through the dissemination of artificial intelligence (a major potential source of strategic competition for great powers) is created. Moreover, the great impact has its rapid spreading as well as being and the instability that its uncontrolled release. All of these are the actual research theme (Kania, 2021).

This research related to artificial intelligence provides the theoretical concreteness that needs to be discussed. With the rapid dissemination of artificial intelligence (as a key factor in technical development), created by it instability and uncertainty can become a main potential source of geopolitical competition in the fourth industrial revolution and have a significant impact on the global ecology.

Materials and methods

To answer the question of what is the impact of political globalization on the world processes both in political and environmental ways were used comparative method, retrospective, empiricist, and forecasting methods. We have conducted an analysis of how artificial intelligence has different from other technologies. What impact it has on global environmental processes? At which level are the applications and the proven capabilities of artificial intelligence technologies and what is their influence on security in the global war-stop effect and the environment protection way? These should be considered in connection with the military strategy of the global power centers as well as the aims of imperialism because of their global impact on the planet being.

Results and Discussion

Digital life increases present and future opportunities but it disrupts the formed man's activity for years. Code-driven systems covering more than half of the world's population in environmental information and communication, offer previously unthinkable opportunities and unseen threats. As artificial intelligence managed by the new algorithm goes on to diffuse the questions like will the security issues of people and nations be better than it is now? What consequences can lead to the utilization of artificial intelligence in possible conflicts or wars? Do global powers have any strategic plans related to artificial intelligence in the implementation of neo-imperialist interests? These indicate the complexity of the multi-vector aspects of the problem related to this theme which is still not clear.

Artificial Intelligence and Future War:

The main aim in the modernization and innovative development of each kind system is the improving of the living conditions foreach one person as well as to provide a welfare environment for future generations (Newell, 2013; Takle, 2021). In the last ten years, researchers have achieved great results in the progress of artificial intelligence (AI) and related to technologies (quantum computing, big data, the internet of things, nanotechnology, robotics). Furthermore, achieving the results which are several times ahead of the forecasts of experts indicate to increase significantly curiosity to artificial intelligence. Artificial intelligence has the potential to enable many new types of low-cost, high-impact military technologies. Some of them may make current investments of the Department of Defense unattractive. "Though the development timeline of many specific AI capabilities is unclear, AI has the potential to be a transformative military technology. Some of these future, AI-enabled capabilities will change the relative attractiveness of procurement and sustainment investments that the Department of Defense plans to make. For instance, the spending justification for some aircraft and naval platforms assumes that they will still have useful military capabilities decades hence. The amount of progress artificial intelligence technology is poised to make over the next 10-20 years should lead the Department of Defense to revisit those assumptions. If swarms of autonomous, long-range, and low-cost kamikaze drones become available, for example, aircraft carriers as we know them may no longer be relevant to the conflicts of the future" (Allen and Chan, 2017, pp. 61).

It appears from the conclusions of experts regarding the above-mentioned development of artificial intelligence that this process will not only affect all spheres of public and international relations completely, but will also become a major weapon of potential conflicts and wars. In this sense, the usage of artificial intelligence can serve on the military purposes of forces interested in pursuing the interests of imperialism. "Autonomy and networking, along with other technologies, including nano, stealth and bio, will offer sophisticated tactical war-fighting capabilities on land and sea, and in the air. Consider, for example, the impact that shoals made up of autonomous underwater robots sensitive to tiny distortions in the earth's magnetic field would have on traditional submarines. Deployed around bottlenecks in the ocean, such platforms could complicate efforts to conceal the submarines, which currently provide an assured second-strike capability to nuclear powers. In that way and others, a tactical platform has a strategic impact. In addition to these battlefield roles, AI will transform other military activities, including logistics, intelligence and surveillance, and even weapons design. Collectively, these activities, mostly tactical in nature, will have

a transformative effect on the strategy of those states employing them. This is because militaries that can successfully develop and utilise them will experience a dramatic increase in fighting power relative to those that cannot" (Payne, 2018).

New world order, especially, the geopolitical competition between China and the United States of America will undoubtedly affect from the competition in progress of artificial intelligence capabilities. USA Deputy Secretary of Defense Robert Work speaks during his speech (China National Accreditation Service on conformity Assessment of CNAS) at the CNAS Inaugural National Security Forum that "The transformation potential of artificial intelligence is accepted by world leaders as an important component of national security" (Jonsons, 2019).

At least, in World War II, partially independent military technology systems has been used but recent advances in artificial intelligence have been a major turning point in the usage of cognitive solutions and automations for increasing the "information war in space." It is clear from the geostrategic plans of global power centers that purposeful work related to bring fundamental changes to military power of artificial intelligence is carrying out, and it makes actual the issues of rechanging and regulating the power balance of the world. Till today, the preparation of strategic plans relevant to the level of readiness to artificial intelligence war is increasingly felt between the United States of America and China. For instance, according to challenges from the USA Department of Defense in the annual report of the Department of Congress entitled "Military and Security Developments in the People's Republic of China" states that one of a series of researches on artificial intelligence in China as one of the mostly developing revanchist (especially China and Russia) world's powers in 2016 entitled Research of National Artificial Intelligence and the Strategic Plan on Development was approved. "General, Secretary Work talked about how China is way ahead on this. In terms of what you just spoke about, worldwide awareness, China right now is really still more of a regional player trying to become a worldwide player." (Work and Groen, 2021).

Decisions on the implementation of artificial innovation projects at the national level for the strategy of "exploiting military vulnerabilities of USA" research to become a "superpower of science and technology" and China's "civil-military alliance" (or China's "Sputnik moment", "Artificial Sun") accelerated by Alpha Go's victory clarify the aims of the states competing in the new world order. Globalism is a state of the world and it does not imply universality. Moreover, Globalization as a phenomenon uses public persons (like politicians, actors, or civil activists) to getting its aim and makes influence the environment which often is not good for ecology (Koehane and Nye, 2020; Work and Groen, 2021).

Artificial intelligence and the problem of international security

Modern man in geographical globalization has changed his life area from a scientific viewpoint, adapted it to himself, and created a unique geographical environment. Settlement of the entire planet in such a way XX became clear at the beginning of the century. So, it can be said that the modern stage of geographical globalization has appeared. Today the environmental crisis both other global problems have a significant influence on international life and seriously threaten the future existence of humanity (Meadows and Randers, 2012).

Accepting strategic decisions of China in the field of innovation demonstrate the recognition of the transformative (or military-technical revolution) potential of artificial intelligence in global security with supporting the project entitled "Objectives and Initiatives" by Defense Agency for Advanced Research Projects of USA (DARPA) for providing national security. Specially, in terms of this, according to experts evaluations numerous aspects of artificial intelligence have been identified for creating strategic stability in the global world. "The effect of AI on nuclear strategy depends as much or more on adversaries' perceptions of its capabilities as on what it can actually do. For instance, it is extremely technically challenging for a state to develop the ability to locate and target all enemy nuclear-weapon launchers, but such an ability also yields an immense strategic advantage. States therefore covet this capability and might pursue it irrespective of technical difficulties and the potential to alarm rivals and increase the likelihood of conflict. The case could be made on technical grounds that advanced AI would still struggle to overcome obstacles originating from data limitations and information-theoretic arguments, but the tracking and targeting system needs only to be perceived as capable to be destabilizing. A capability that is nearly effective might be even more dangerous than one that already works." (Geist and Lohn, 2018, p.1-26).

As mentioned by the co-author above, turning a major potential source of instability and great strategic competition of military artificial intelligence rapidly is claimed. In terms of this, the impact in international relations of the usage from artificial intelligence for military purposes can be divided into three main parts:

1. At current progress-stage, isolated artificial intelligence has very few real strategic importances and creates potential opportunities for several high-tech fields including cyberspace and guided rockets via robotic.
2. Uncertainties and risks associated with the proliferation of dual-purpose (military and non-military purposes) artificial intelligence technology can deteriorate international security with several ways: amplify existing menaces; creating a potential danger to the security space; alter the nature and characteristics of these menaces.
3. The simultaneous pursuit of artificial intelligence technology of major and emerging powers (especially, the USA and the China) can create strategic competition and mistrust having potentially profound implications for international security. The rapid dissemination and transformation of artificial intelligence capabilities create war risk for the purposes of future imperialism.

Currently, the existence of the natural environment depends more on the attitude of modern man to the geographical environment than on geological and physical processes. So, this fact itself leads to the emergence of various questions. What are the social conditions of the causes of the wars that have occurred in the history of mankind (currently ongoing)? What processes are geographic globalization the product of, and where is the historical place of man in these processes? Can the expansion of environmental problems lead to interstate wars? How will the balance between the growing demands of the world population and the geographical environment be maintained? Are continuous from the geographical environment of the person all the biological resources it exploits for the necessary needs? What effects can the IV industrial revolution and artificial intelligence have on the ecological environment? (Newell, 2013; Cashman, 2014).

Yuval Harari's (2020) views about playing the role of new technologies in future wars in the book named "Homo Deus" arouse interest in terms of substantiating the impact of artificial intelligence in international relations on three areas in the above. For instance, he notes that "... of course, there is no guarantee to continue a new peace forever. Future technologies can play an important role to new types of wars as affording nuclear weapons make a new peace" (p. 27).

Yuval Harari's (2020) approach indicates that artificial intelligence determines technological development and novelties related to several artificial innovations which can cause to real results up to the strategic level and readjust the tactical field of battle for military purposes (namely, autonomous systems, robotics and cyber capabilities) by changing the military strategy of new types of wars. Just in terms of this, artificial intelligence is conceptualized by applying related to most recently developed technologies in the military doctrine of global powers. For instance, the conditions of existing tussle at the international polars are altered in the formation of a new world order. The struggle for becoming leader of power centers interested in changing mentioned conditions is accepted at the international level, mainly, at the stage of artificial intelligence of the United States of America and China. It is legible to Chinese experts that the United States of America have come a long way in the world of artificial intelligence and develops flawless programs for execution in space vacuum, including the Star Wars Program, as well as dozens of military cyber programs based on artificial intelligence. The Star Wars program was launched in 1983 by Ronald Reagan - one of the USA president. Later, commencement of this project is decided again by former USA president Donald Trump. China is also in need of rising to the leadership level with alternative projects for playing a role in the new world order in the face of such advances in the field of artificial intelligence of the United States of America. In terms of this, China has two difficulties in front of it for struggling with the United States of America.

Firstly, attentions to obtain indirectly USA programs relating artificial intelligence; secondly, the problem of concentrating vast financial resources of China for struggling with the United States of America in this way.

The crucial role of artificial intelligence in warfare

The constructed analysis related to the enlightenment of the first issue indicates that China insists on having artificial intelligence programs and being implemented strategic aims in this way. On the other hand,

adoption priorities for artificial intelligence in terms of acquisition of new technologies and improvement of work in the direction of conducting analysis in this way probably will have a profound effect to the strategic results and operational level for determining China's future status in the world order.

The arguments in the prepared document about “National Security Strategy” by a former national security adviser McMaster (2017) and in the “National Defense Strategy” compiled by USA Secretary of Defense Mattis(2018) confirm what the experts say about it. Has been noted, *"inter-state strategic competition, not terrorism, is now the primary concern in U.S. national security."* And both documents correctly focused on the looming threat from Russia. As the National Security Strategy stated, *"Russia seeks to restore its great power status and establish spheres of influence near its borders."* (Boot, 2022).

On the one hand, the response of the new technologies to geostrategic aims depends on the current geopolitical situation but on the other, the validity of both decisions mentioned above will depend on the application of artificial intelligence in the Russian-Ukrainian war and its consequences. And we have to say that this war in the center of Europe triggered a tsunami. It dramatically impacted the world economy as well as geopolitics and moreover food security. Due to the extreme and terrible humanitarian situation, the effects of the environmental damage have been out of view. But it has to be noted that the impacts of this conflict are already dramatic and produce an environmental disaster because of the intense fighting and inhumanity action of the aggressor militaries on Ukraine's territories (Pereira et al., 2022).

After the application of artificial intelligence technologies in the Patriotic War of Azerbaijan for the first time, the choice of this strategy aroused great interest in many countries around the world, and there is no doubt the usage of the same experience in the ongoing war in Ukraine area. The usage of local production “Itigovan” of Azerbaijan in the patriotic war, unmanned aerial vehicles named TB2 Bayraktar made in Türkiye and artificial intelligence technology as Israeli suicide drones was to be tested of a new type of war strategy in military history.

Nowadays, the both results of the Second Karabakh war in Azerbaijan and in the Russian and Ukraine war indicate that the differences between artificial intelligence tanks considered as the long-term "basic technique" of warfare and other weapons display to have which advantages.

For instance, The Washington Post in the article by Max Boot (2022) named *"Russian tanks are taking a beating. Do they still have a place on the modern battlefield?"*. It is noted that *"The Russians have attacked using large numbers of tanks and armored vehicles, which again emphasizes their importance on the battlefield. But the Russians have also suffered devastating vehicle losses at the hands of Ukrainian troops armed with potent, hand-held antitank missiles such as the American Javelin and the British NLAW (Next Generation Light Antitank Weapon). The Ukrainians have also made good use of Turkish Bayraktar TB2 drones firing antitank missiles. Open-source reporting indicates that the Russians have lost more than 1,600 vehicles and equipment, including nearly 300 tanks and more than 500 armored vehicles of other kinds"* (Boot, 2022)(the quote was taken on the 36thwar-day, and we should note that the war was still going).

The defenseless appearance of tanks and classic weapons in the face of technologies manageable via artificial intelligence is an obvious indication of revolutionary changes in the military in the context of intervention in Ukraine by Russia considered one of the world's military power giants in the mentioned article above (Cabrailov, 2022). But more vulnerable is the environment. There is evidence of severe air pollution and greenhouse gas emissions in this territory that is a result of the intense fights that are going on now. One more, threat is military activity near the Zaporizhzhia nuclear power plant which is the biggest in Europe as well as the capture and control of the Chornobyl nuclear power plant in February-March, 2022. All of these increase the fear of radiation pollution in large territories and not only in Ukraine. Active fights significant impact on biodiversity as well as the mining of the territory. We can observe deforestation because of fire and missile strikes that already have implications for wildlife. Moreover, this war has impacted the soil quality degrading it and changing the landscape morphology (Pereira et al., 2022).

Although not being new digital technologies revolutionary to future wars consensus has formed concerning to be an evolutionary impact between defense experts despite the existence of critics related to the application of artificial intelligence(Gault, 2022). Collaborator of the Research Center of the USA Congress K. Saylor(2020) describes the current debate relating artificial intelligence technology, the potential activity

of a wide range of military applications, and the utilization of force. Then it identifies and categorizes central security menaces posed by artificial intelligence amplified capabilities. He notes about how and why specific innovations and military applications will have a major impact to future conflicts and the dynamics of military escalation. He notes to conceptualize the capabilities of autonomous weapon systems with the strategic influence of artificial intelligence. “Similarly, the Army’s Logistics Support Activity (LOGSA) has contracted IBM’s Watson (the same AI software that defeated two Jeopardy champions) to develop tailored maintenance schedules for the Stryker fleet based on information pulled from the 17 sensors installed on each vehicle. In September 2017, LOGSA began a second project that will use Watson to analyze shipping flows for repair parts distribution, attempting to determine the most time- and cost-efficient means to deliver supplies. This task is currently done by human analysts, who have saved the Army around \$100 million a year by analyzing just 10% of shipping requests; with Watson, the Army will have the ability to analyze 100% of shipping requests, potentially generating even greater cost savings in a shorter period of time. AI is likely to be a key technology in advancing military cyber operations. In his 2016 testimony before the Senate Armed Services Committee, Commander of U.S. Cyber Command Admiral Michael Rogers stated that relying on human intelligence alone in cyberspace is “a losing strategy.” (Saylor, 2020, p. 11). And we have to note that world security can’t be separated from environmental problems. And we have to note that world security can’t be separated from environmental problems. Each war has serious damage action: on people and the Earth of the as living environment. And often post-conflict development becomes in without an environmental assessment as we can see in last-war areas in Karabakh (the place with stopped active military activity) and Ukraine that tries to develop in a difficult war reality. Each military action has environmental damage that may lead to a strict impact socioeconomic. Today we can see a food crisis due to an attack on the most fertile soils in Europe. This already has serious negative consequences for humanity people and not only in Europe as a conflict place but Africa and Asia as food consumers (Pereira et al., 2022; Darbyshire and Weir, 2022; Rawtanietal., 2022).

Related to application of artificial intelligence to military technologies above-mentioned theoretically of Saylor(2020) took advantage of potential opportunities from the practical viewpoint in the Second Karabakh War. For instance, the Bayraktar TB2 unmanned aerial vehicle has many advantages it currently differs from other pre-existing unmanned vehicles. The Bayraktar TB2 unmanned aerial vehicle leaves its hangar autonomously, lands at the head of the runway, takes off, performs the operation and returns to the hangar. Bayraktar is designed so that the artificial intelligence what controls it makes opportunity to continue on its path if the ground contact is lost. The role of Bayraktar unmanned vehicle which has artificial intelligence and destroyed high-precision military technology with high accuracy in gaining victory in Karabakhof Azerbaijan indicated that the fate of present and future wars will depend on the skillful using side from artificial intelligence. In terms of this, thanks to the strategy chosen by President IlhamAliyev to ensure the present and future security of Azerbaijan, especially, the preference of the new generationwar technologies equipped with artificial intelligence during the patriotic war, completely destroyedthe defense system and modern military technologies used in the occupied territoriesof the Armenian side in 44 days. For the first time in the history of wars, Azerbaijan's application of artificial intelligence technologies on the battlefieldwhich has not been used for military purposes displays that with considering the new trends in war strategy, specially, the critical impacts of recent advances in automation on big data have been taken into consideration the advantages over combat weapons to date.

For instance, the usage of artificial intelligence technology in the Patriotic War of Azerbaijan resulted in the destruction of military technique donated \$ 5 billion by geopolitical forces to Armenia in the interests of imperialism for nearly 30 years. Almost, Azerbaijan clearly demonstrated the superiority of artificial intelligence on other weapons for the first time in the history of wars to date. Armenia's signing of a capitulation statement which resulted in the complete destruction of its military capability as a result of Azerbaijan's 44-day victory was commenced to investigate by variety centers as an event that is essential to study and watched with interest in the military field of world.

Thus, the important point is not the problem being or not being tanks or artillery in the armies in the future, the point is that states which able to benefit sufficiently from the potential power of artificial intelligence, including the limitless opportunities created by digital technologies will be able to gain strategic and

geopolitical success in the near future. "Some visionaries suggest that the eventual M1A2 Abrams replacement shouldn't be a new tank at all, Breaking Defense writes, but a wolf pack of manned and unmanned vehicles working together." (Boot, 2022). And there is a big question will we have a space for living in a reality of the globalization big game on the planet? (Newell, 2013).

In terms of this, states and global powers based on the philosophy of imperialism will impact the geopolitical and ecological landscape of the world taking into consideration the inexplicable features of artificial intelligence related to the future and its secret competition with each other in the near future.

Conclusion

Researches indicate that artificial intelligence more resembles an electrical, radio, or radar system than a "weapon in terms of strengthening and increasing military capabilities." Artificial intelligence has the opportunity to alter and redefine the situation potentially by using unpredictable and likely destabilizing, high-impact military technologies as a more powerful technology class. All of them indicate that weapons and systems enhanced with artificial intelligence have the potential to make better decisions than humans. On the one hand, the application of progress to weapons will affect in a way that can potentially transform them into artificial intelligence technology. On the other hand, it will increase the ability to make independent decisions in gaining an advantage or for a military balance in a future war. And the biggest task is to save our planet for future living in the globalization and new-imperialism players' activity.

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