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Artificial Intelligence : The New Cognitive Terrain for World Domination

الذكاء الاصطناعي : الأرضية المعرفية الجديدة للهيمنة العالمية

Intelligence artificielle : le nouveau terrain cognitif pour la domination mondiale

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Introduction

Artificial intelligence is considered one of the branches of computer science that aims to build systems capable of imitating or simulating human cognitive abilities, such as learning, thinking, reasoning, perception, and adaptation, without human intervention.

Artificial intelligence systems are part of an interdisciplinary field, which includes political science and international relations. This has led to the emergence of conceptual, theoretical, and methodological shifts in the understanding and assimilation of global transformations, resulting in an increasing gap in solving the dilemmas that arise from using artificial intelligence systems, especially in countries lacking advanced technology.

This situation has made artificial intelligence a field of competition for global dominance and established a new world order characterized by complexity, instability, and a lack of coordination between nations.

Given all these factors, we can pose the following research question:

- What is the effectiveness and efficiency of artificial intelligence systems as contributors to the promotion of global hegemony?

To answer this research question, the following scientific hypothesis was examined and tested:

- Artificial intelligence systems have led to the reformulation of the concept of hegemony from a traditional geopolitical perspective to a modern technological one.

To address the research question and test the formulated hypothesis, a structured scientific plan has been designed, divided into three major sections :

The first section examines the historical emergence of artificial intelligence, the origin of the term, and its definition.

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The second section, titled "Artificial Intelligence and the Fragmentation of the Linear Governance Model", focuses on competition among major technology companies and its geopolitical implications, with particular emphasis on the application of artificial intelligence in defense systems.

1. Theoretical and Methodological Framework

Answering the research question and testing the validity of the scientific hypothesis requires adopting a diversified methodological framework, including various approaches, theories, and analytical tools.

A systemic approach has been employed to comprehend and interpret global transformations. A functional approach has also been used to understand changes affecting certain sectors related to artificial intelligence systems, such as national defense institutions, as well as the disintegration affecting the traditional state model. Additionally, the theory of electronic deterrence, in comparison to traditional nuclear deterrence, has been applied to understand and analyze cyber warfare. The theory of information and communication, linked to the rapid flow of information networks, has been considered for its impact on the national security of countries. The neoliberal institutional approach has also been adopted to examine the transition from traditional diplomacy to digital diplomacy and the shift towards digital geopolitics in economic cooperation.

2. Artificial Intelligence: A Constantly Evolving Workshop Between Scientific and Practical Efforts

This section aims to define the concept of artificial intelligence (AI), explore its fields of application, its types, and assess to what extent science fiction has influenced the realization of AI in reality.

2.1. Artificial Intelligence: Mastering the Concept and Defining the Term

The concept of artificial intelligence emerged in the second half of the 20th century, and its development can be divided into three main phases:

- First Phase (1940–1960): Mathematical transformations were used to create systems capable of data analysis and decision-making.
- Second Phase (1956): At a conference held at the "Tooth House" in the United States, John McCarthy and other scientists formulated the concept of artificial intelligence for the first time. They started developing programs for mathematical data analysis. In 1957, the

scientist Frank Rosenblatt made the first attempt to build an intelligent machine with a simplified model of a neural network that closely resembled human neurons.

- Third Phase (1960–2000): This period marked the rise of neural networks. In 1988, Professor Kevin Warwick, from the University of Reading in the UK, experimented with the interaction between computers and the human nervous system by implanting an electronic chip in his arm, wirelessly connected to a computer. This demonstrated the capabilities of artificial neural networks.

Artificial intelligence can be defined as the simulation of human cognitive processes using computer-like systems. It is characterized by its ability to think, learn, perform tasks, make predictions, or identify patterns that humans may not easily detect. According to SHAPIRO (1992), AI is "a field of science and engineering that deals with understanding behavior using computers and creating artificial systems that reproduce this behavior." Other definitions, like that of LEVESQUE (2013), focus on the computational study of intelligent behavior.

The provided definitions highlight that artificial intelligence primarily focuses on studying intelligent behavior, aiming to surpass human cognitive abilities, thus representing a qualitative leap in the field of modern technologies.

2.2. Characteristics of Artificial Intelligence

The main characteristics of AI can be summarized as follows:

- Intelligence: AI systems have the ability to adapt to new situations, allowing them to perform tasks previously exclusive to humans.
- Self-Learning: AI systems can improve their performance over time without human intervention.
- Decision-Making: AI systems are capable of making decisions based on data, rules, and probabilistic reasoning.
- Natural Language Processing: AI systems can understand, interpret, and generate human language.
- Perception: AI systems can detect and interpret their environment using various sensors and input devices.
- Creativity: AI systems can generate new ideas or solutions, leading to innovations in various fields.

- Problem Solving: AI systems can analyze complex problems and propose solutions.
- Parallel Processing: AI systems can process vast amounts of data simultaneously.

After providing a theoretical and conceptual analysis of artificial intelligence, we aim to relate its significance to the disciplines of political science and international relations by focusing on the effects of artificial intelligence on the field of international politics.

2.3. Measuring the Effects of Artificial Intelligence on International Politics

A report published by Chatham House (Royal Institute of International Affairs, 2018), titled "Artificial Intelligence and International Affairs : The Coming Disruption", aims to measure the effects of artificial intelligence on international policies in the short and medium term, as well as its impact on global security. The report identifies three primary roles of artificial intelligence in the field of global politics :

- Analytical Role : By analyzing databases and obtaining results consistent with programmed models to monitor the implementation of nuclear weapons control treaties, artificial intelligence can help process the increasing amount of data, whether commercial or industrial, providing decision-makers with crystallized information to make appropriate decisions.
- Predictive Role : Artificial intelligence can provide decision-makers with likely future scenarios. For example, an international business decision-maker can propose models for complex negotiations based on the anticipated positions and approaches of other actors. With the accumulation of knowledge and the increasing sophistication of application programming, artificial intelligence can make highly accurate and complex predictions.
- Operational Role : Modern logistics applications significantly impact international politics. In the arms sector, drones are widely used, and autonomous cars are present in commercial markets, affecting the pace of political and economic developments globally, and enhancing response to risks.

The report also emphasizes measures to enhance human security through artificial intelligence, including:

- Knowledge Generation: By analyzing and categorizing collected data, systems like EMBERS use available data from sources such as Google and social media to predict social phenomena with an accuracy of up to 94%.
- Planning: This involves developing AI applications to assess risks and crises, respond to emergencies, and create optimal scenarios to mitigate losses, particularly effective in non-governmental and civil society organizations due to lower bureaucracy and faster decision-making.
- Empowerment: Utilizing various AI applications, decision-makers are equipped to make better-informed decisions.
- Justice, Transparency, and Responsibility: Establishing rules to protect data used by AI applications ensures data is not monopolized by elites or used for malicious purposes, such as political repression or fraud. Individuals have the right to know why and how their data is being used (Cummings, 2018, pp. 1–9).

In this section, we have sought to establish a cognitive basis for artificial intelligence to guide research and design a robust conceptual and methodological framework for assessing the causal relationships between the study's variables. Based on this, the next section will explore the applications of artificial intelligence in political science and international relations, including defense systems and military applications.

3. Artificial Intelligence and the Fragmentation of the Linear Governance Model

On the surface, the multiplicity of institutional arrangements and companies might seem like collective action aimed at reducing global conflicts from a neoliberal perspective. However, the intense proliferation of tech companies presents a competitive geopolitical model that seeks dominance. Even proponents of innovation and scientific research in building knowledge power share this view. Consequently, control over global transformation outcomes is held by those with access to information power, determining their global positioning.

3.1. Competition Among Large Tech Companies in AI Innovation and Research

In *AI Superpowers : China, Silicon Valley, and the New World Order*, Kai-Fu Lee details the Chinese experience in artificial intelligence. He emphasizes that

China, alongside many investors, has started investing heavily in AI, resulting in a surge of students entering this field. By 2017, China accounted for about 48 % of total global AI funding, surpassing the United States, and aims to lead global AI innovation by 2030 (Cummings, pp. 10–11).

The United States remains a leader in this field, with major tech companies (Google, Amazon, Microsoft, Facebook, Oracle, IBM, and Alphabet) investing heavily in AI. These companies often acquire smaller firms or establish specialized AI units within their development structures, linked to leading university research centers (Lee, 2018). For example, Google launched a new version of its AI Test Kitchen, featuring the interactive chatbot Lam-Da, and the Bard chatbot integrated with its Bing search engine.

Microsoft invested between $ 10 and $ 20 billion in OpenAI to integrate AI systems into its products. Similarly, Meta is developing a supercomputer named AI Research SuperCluster, designed to process billions of operations per second, enhancing its capabilities (XuUs, 2022).

Apple has acquired the most AI-related companies between 2016 and 2020, aiming to improve its Siri assistant, signaling fierce competition against Google and Microsoft. Oracle, meanwhile, has modernized its services with an AI-enhanced robotic software program (Gould, 2023).

The U.S. currently leads in AI applications, with China in second place. At the Munich Security Conference in February 2023, President Joe Biden urged for enhanced AI cooperation with Europe to maintain its advanced position, especially against China's rapid progress and plans to integrate AI into various sectors by 2049, the centenary of its founding. Countries like Canada, Japan, and South Korea are also making significant strides in AI, with substantial investments and strategic plans in place (Gould, n.d.).

Eric Schmidt, head of the U.S. National Security Commission on AI, stressed the need for the U.S. to maintain its lead over China in AI competition. According to estimates, the Chinese AI market was valued at 71 billion renminbi in 2020, with over 800 specialized companies. Tsinghua University leads in AI research publications, followed by Carnegie Mellon University in the U.S. (Al-Sadiq, 2023, p. 12).

This competitive landscape highlights the rivalry between American and Chinese tech firms in AI development. Companies fear potential financial losses as competitors emerge in the U.S. search engine market, with new entrants like Neeva and You.com gaining traction (Al-Sadiq).

3.2. Artificial Intelligence and Network Penetration for State Functions and National Security

The introduction of artificial intelligence has led to an epistemological critique of the performance and functions of the traditional state (sovereignty, authority, population, and territory). The state no longer exclusively possesses coercive power, which opens the way for non-state actors and companies that control data. This has raised questions about the authority of the nation-state in favor of a hypothetical world government concept and the role of artificial intelligence technologies in an epistemological revision of the traditional concept of authority. The ontological approach, considered one of the pillars of the state, paves the way for a post-truth society, dissolving stable authority. This involves dismantling common values and promoting a liberal society, as seen in the discussions calling for participation in the "World Government Forum for Artificial Intelligence", aimed at enhancing the capacities of global government agencies by linking their activities to modern technologies. Automation has become a significant criterion for evaluating the performance of authority, with the use of modern technologies and artificial intelligence being one of the critical determinants of its effectiveness growth of non-state actors collaborating with the state in various fields, particularly in intelligence, has blurred the boundaries between intelligence agencies and the private sector. Political elites can also utilize artificial intelligence techniques to gain voter support, as demonstrated by French President Emmanuel Macron in his 2017 election campaign, through the development of a social neural network. Additionally, concerns have been raised about the potential misuse of artificial intelligence to generate fake images, videos, or texts using advanced tools, spreading disinformation, compromising the reliability of data, and influencing decision-making processes, potentially leading to conflict. National security officials could exploit AI systems to undermine decision-making, reduce human oversight in automated control models, and possibly escalate conflicts, raising concerns about the mass surveillance capabilities of AI, which could infringe on privacy and human rights.

The intelligence to national security also lies in biases inherent in certain applications. Algorithms may be inherently biased, with errors arising from the biased selection of data in automated control models, creating a significant challenge in balancing system accuracy with fairness. Additionally, the decline of ethical controls is worrisome, especially with the use of autonomous weapons that may not adhere to ethical or international regulations, such as

drones. The possibility of AI developing self-awareness in the absence of laws regulating combat robots could lead to targeting both civilian and military objectives independently, increasing the risk of losing control over weapon systems. Furthermore, AI's inability to make emotionally driven decisions may limit its capacity for innovative problem-solving, posing challenges for decision-makers.

AI's potential for attacks is another concern. Security systems based on AI, designed to protect against cyber threats, could be compromised by hackers. Malicious actors could launch fraudulent attacks, exploiting vulnerabilities in AI-based security systems and creating deepfakes that threaten national security. For instance, videos warning of imminent wars or false claims of withdrawal from elections could severely impact political stability. This prompted U.S. Representative Marco Rubio to declare that AI poses a greater threat than biological weapons due to its potential to identify new antibiotics or toxins, which could be manipulated by terrorist organizations.

An analysis of AI systems' transinto a competition arena among global powers reveals their potential to disrupt state functions and penetrate national security. This examination extends to AI applications in military and defense industries, exploring the tension between control and fear of a potential third world war.

3.3. Applications of Artificial Intelligence in Military and Defense Industries

In recent years, significant advancements in artificial intelligence (AI) have garnered attention, particularly in natural language processing and computer vision. These developments allow for more intuitive human-machine interaction and enhanced image and video analysis. Such progress paves the way for broader military applications of AI, including more efficient and less human-dependent operations in weapons systems, sensors, air support, and surveillance (Sentient, 2023).

For instance, the U.S. Department of Defense outlined an AI strategy in 2017 to integrate AI technologies into defense and research operations. Compared to traditional defense systems, AI-driven military systems can process vast amounts of data more efficiently and improve the self-organization, control, and functionality of combat operations. Key advantages of AI applications in the military include :

- Threat Detection : AI-powered sensors in aircraft and ground vehicles can identify and mitigate threats in real time.

- Reduction in Human Labor : AI is increasingly used to automate tasks across various sectors, including manufacturing and agriculture, thereby reducing workforce demands.
- Enhanced Recruitment : AI facilitates more efficient recruitment processes, enabling defense organizations to identify qualified candidates more effectively (Eliacik, 2022).
- Improved Decision-Making : AI enables accurate data analysis, enhancing targeting §trategies and attack preparation (Genesis, *The Pros and Cons of Using AI in Military Divisions*, n.d.).
- Cybersecurity : AI can mitigate cyberattacks that threaten advanced military technologies, safeguarding national security.
- Mobility : Autonomous vehicles equipped with AI provide crucial data in geographically unfamiliar areas (Genesis, n.d.).

James Johnson, a professor at the University of Leicester, highlights the transformative potential of AI in his study *Artificial Intelligence and Future War : Expected Implications for International Security* (2019). He emphasizes AI's role in enhancing military capabilities through remote sensing, rapid data analysis, and decision-making under pressure. At the strategic level, AI mitigates human error in traditional decision-making processes, but it also raises new security concerns, such as digital threats (e.g., identity theft and cyberattacks), physical threats (e.g., drone swarms), and political risks (e.g., surveillance and misinformation) (Johnson, 2021).

In his book *Artificial Intelligence and the Bomb* (2023), Johnson envisions a potential AI-triggered nuclear conflict between the U.S. and China. Similarly, Joe Yellow Musk, a contributor to OpenAI, warns of AI's role in developing more lethal weapons, prompting over 1,000 experts to call for a temporary halt to advanced AI systems development (2023 ،نهاري).

Emerging AI trends in warfare include the deployment of autonomous weapons, the use of deep fakes for deception, improved reconnaissance, and the integration of 3D printing in military industries (2023 .أ ،الاستراتيجية). AI-guided systems like Project Maven have already proven effective in counter-terrorism operations, enhancing offensive capabilities while reducing costs and casualties (Stefan, 2020).

The growing demand for drones, especially among non-state militias and terrorist groups, underscores the expanding role of AI in military technology. The market for military drones is projected to grow from $ 11.3 billion in 2021 to $ 26.1 billion by 2028, driven by AI-enabled data management

and versatile applications ranging from intelligence gathering to combat operations (الشـامي، بلا تاريـخ).

These advancements mark a shift from traditional military arsenals to remote-controlled mechanisms, raising concerns about an escalating arms race and necessitating a reevaluation of deterrence and conventional military strategies.

3.4. The Arms Race in Artificial Intelligence : Shifts in Deterrence and Balance of Power

The global trend toward the militarization of artificial intelligence (AI) has triggered a cognitive revolution in security and military theories, reshaping key concepts. These transformations can be observed as follows :

- New Standards for Measuring Power in the International System : While state power continues to be assessed through both material and moral dimensions, the spread of AI across civil and military sectors is altering the global and regional balance of power. Competition for AI dominance may lead to new conflicts and wars. The *Institute of International Relations and Strategy* in Paris (2017) warned that international rivalry over AI could escalate into a third world war.
- Reshaping Future Warfare : Experts predict that future wars will undergo significant changes, revolutionizing traditional deterrence concepts. Innovations such as hypersonic missiles, capable of traveling several times faster than sound, and the digitization of less costly yet highly destructive wars are examples of this shift.
- Emergence of New Deterrence Tools in Conflict Management : While the threat of military force remains a key deterrent, new tools, such as electronic and cyber-attacks, are becoming equally effective. These developments have led major powers to establish specialized space warfare units, integrating electronic and cyber-attacks into their core military arsenals (الحـداد، 2023).

4. Artificial Intelligence Deconstructs Traditional Geography and the Implications of Digital Diplomacy

This section explores the impact of artificial intelligence (AI) on diplomatic practices and how digital diplomacy transcends traditional geographical boundaries. We analyze the shift from traditional systematic geography to a more open digital space, questioning whether we are witnessing the end of geography as we once knew it.

4.1. Artificial Intelligence and the Empirical Impact on Diplomatic Functions: From Traditional to Digital

Manor and Segev, in their book *Theory and Practice of Digital Diplomacy*, highlight that digital diplomacy involves the use of social media platforms by states to achieve foreign policy goals. They note that digital diplomacy operates on two levels : adapting messages to local audiences and enhancing national branding. By tailoring their foreign policy messages, states can increase the acceptance of their image and objectives among international audiences (Hashem, 2023, pp. 126–127). Bjola and Holmes further define digital diplomacy as the strategic use of digital technologies to influence international relations, which adds depth to the understanding of this evolving practice.

These definitions illustrate the transition from traditional diplomacy to digital diplomacy, driven by the revolution of AI technologies. AI is not merely a tool ; it can become a subject of diplomacy itself, shaping the environment in which diplomatic relations unfold. It enhances diplomats' daily tasks and may even form the basis of the future international system (Ceveva, 2019).

A report by the American Center for Security suggests that AI can improve diplomatic communication by overcoming language barriers, enhancing embassy security through image recognition, and supporting international humanitarian operations during crises. Specific AI tools, such as sentiment analysis software and chatbots like ChatGPT, are increasingly employed in diplomatic scenarios to facilitate communication and analyze trends effectively.

Digital platforms have become essential for crisis management, enabling embassies and NGOs to understand events in real time, streamline decision-making, and resolve crises more effectively. However, caution is advised due to the risks of misinformation and coordination challenges (Corneliu Bjola, 2019, p. 05).

In international negotiations, AI can assist by providing data analysis, predicting trends, and offering insights that improve the negotiation team's strategy. AI systems can serve as informal channels for communication and data gathering, much like applications such as ChatGPT (Khalifa, 2023, pp. 1–2). Natural language processing (NLP) and machine learning can analyze negotiation strategies and predict outcomes, adding a layer of strategic foresight.

Despite these advantages, AI presents risks, including cybersecurity threats, identity theft, and the spread of misinformation. On April 21, 2021, the European Union proposed AI regulations to address ethical concerns, particularly regarding facial recognition and biases in decision-making (Stiftung Wissen T Chat Und Politick, 2022). International agreements like the EU's AI Act are playing a crucial role in setting ethical standards for the use of AI in diplomacy.

3.2. Artificial Intelligence and the Future of Geopolitics

During the Cold War, political geography experienced a period of stagnation, described by Brian Perry as "stagnant waters." However, technological advances, particularly in AI, have revitalized geopolitics. Richard Hoyer suggested that political geography could become a "rising phoenix," symbolizing renewed relevance. Advances in AI have blurred borders and weakened traditional geopolitical constraints, bringing regions closer through interconnected supply chains and multinational corporations.

Chris Miller, an economic historian, argues that technological competition, especially in semiconductor production, will fuel future geopolitical conflicts, with microprocessors becoming the "new oil" of geopolitics (Al-Habib, 2023). The global shortage of semiconductors has significantly impacted power dynamics, particularly between the United States and China, highlighting the strategic importance of this sector.

Samir Saran of the Observer Research Foundation states that emerging technologies, including AI and robotics, are redefining geopolitics. He introduces the concept of the "impossible triangle," where sustainable economic growth, national security, and individual rights increasingly come into conflict. Different countries prioritize these aspects in their geopolitical strategies, with noticeable differences between Western democracies and authoritarian regimes.

Susana Malcorra, Dean of the School of Public Affairs, emphasizes that the most significant impact of technology on geopolitics comes not from the technology itself but from the surrounding systems. Control over major tech companies will determine geopolitical influence, shaping global political landscapes through mechanisms like the "attention economy" and "surveillance capitalism" (Faraj, 2023). Companies like Google and Facebook play a pivotal role in influencing international political narratives, making them key actors in the new geopolitical arena.

3.3. Artificial Intelligence and the Hegemonic Characteristics of Digital Geopolitics

We can argue that traditional colonialism, characterized by violent appropriation of land and resource exploitation, is now mirrored by the practices of the artificial intelligence industry. According to scholars like Nick Couldry and Ulises A. Mejias (2019), this phenomenon can be seen as a form of "data colonialism," where the extraction of data from marginalized communities replicates the dynamics of past colonial exploitation. Sabelo Mhlambi, a member of the Digital Civil Society Laboratory at Stanford, highlights how the dominance of external tech companies exacerbates this power dynamic. The rise of artificial intelligence technologies, driven by large corporations, often leads to the appropriation of data from vulnerable populations, reinforcing existing global inequalities.

A study by the Institute of Race Relations in the United Kingdom, titled "Digital Colonialism : The Empire of the United States and New Imperialism in the Global South," warns of the reshaping of American dominance in the Global South through the control of digital infrastructures (Fuchs, 2020). The report specifically examines South Africa, demonstrating how American multinational companies maintain an imperial grip over the digital ecosystem, from software and hardware connectivity to network architecture. This control results in a new form of digital hegemony, extending imperial power over political, economic, and cultural domains, a concept similar to what is termed as "digital imperialism" by Shoshana Zuboff (2018) in her analysis of surveillance capitalism.

Conclusion

This research has aimed to systematically analyze the intersection between artificial intelligence and global hegemony, proposing AI as a dependent variable and global dominance as an independent variable. The findings support the hypothesis that artificial intelligence plays a crucial role in shifting traditional geopolitical hegemony towards a new form of technological dominance. This transformation is part of a broader effort to reconsider linear hegemony frameworks, as discussed by Antonio Gramsci in his work on cultural hegemony, adapted to modern contexts by scholars like Joseph Nye (2004) with his concept of "soft power" in digital governance.

Key findings of the study include:

1. Definitions and Theoretical Gaps: Current definitions of artificial intelligence predominantly stem from technical fields, often failing to

accommodate perspectives from social sciences and humanities. This issue is highlighted by scholars like Kate Crawford (2021), who calls for a more inclusive approach that integrates political science and international relations into the AI discourse, arguing for an "AI for social good" framework.

2. Analytical Challenges in International Relations: As emphasized by scholars like Alexander Wendt (1999), the rapid transformation of AI systems outpaces the development of compatible analytical tools within the field of international relations. Theoretical approaches such as constructivism and realism struggle to account for the new, non-state actors like AI systems, complicating traditional power dynamics.
3. AI in Decision-Making and Crisis Emergence: The application of AI in political decision-making introduces risks related to algorithmic biases and the potential for misinterpreting complex data. As Cathy O'Neil (2016) warns in *Weapons of Math Destruction*, unchecked reliance on AI in policy can exacerbate systemic crises and even lead to conflicts, as automated systems lack the nuanced understanding of human decision-makers.
4. Military Applications and Strategic Shifts: The use of AI in military and defense industries represents a paradigm shift, as described by scholars like Peter W. Singer (2009) in *Wired for War*. AI technologies offer advantages in precision and time efficiency, marking a significant departure from traditional, heavy military arsenals and redefining the concept of deterrence in a digital era.
5. Redefining Diplomacy and Digital Sovereignty: The advent of digital diplomacy and AI-driven negotiation simulations has transformed traditional diplomatic practices. This aligns with the concept of "connectivity wars" proposed by Mark Leonard (2016), where digital infrastructures become new battlegrounds for geopolitical influence.
6. Geopolitical and Colonial Reconfigurations: The integration of AI in international relations has led to the emergence of what James Bridle (2018) terms "New Dark Age," a scenario where data flows and digital infrastructure become tools of control, reshaping traditional notions of geopolitical dominance. This is especially evident in discussions around "electronic colonialism" (McPhail, 1981), where

countries without advanced technologies become dependent on digital infrastructures controlled by a few dominant nations.

7. Final Thoughts : : AI systems have emerged as a new cognitive terrain for global hegemony, particularly dominated by the United States and China. These superpowers are central actors in the race for AI supremacy, a contest that highlights the increasing role of AI as an autonomous agent in international relations. As scholars like Benjamin Bratton (2015) argue, AI could be seen as a new type of actor, raising ethical and legal questions about its legitimacy. The future of AI in shaping the identity of individuals, social systems, and state cohesion remains an open field for research, as its impact continues to expand across multiple domains of international relations.

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Abstract

As a conceptual, theoretical, and procedural foundation at multiple levels, this article critically evaluates and abstractly examines the process of understanding and adapting to the rapid spread of cross-border artificial intelligence systems. This phenomenon has led to a reconsideration of traditional theoretical concepts and approaches, explaining global transformations marked by disruptions and a lack of coordination among active units, as well as shifts in the field of hegemony among the key players of the global system. The study relies on a systematic scientific framework to address its research question by testing a hypothesis on the influence of artificial intelligence systems as a domain of global dominance. The findings reveal paradoxes and narrow the gaps between scientific theory and practical application.

Keywords

Artificial intelligence, Deterrence, Technology companies, Dominance, Innovation

مستخلص

باعتباره تأصيلًا مفاهيميًا ونظريًا وإجرائيًا على مستويات متعددة، يُقيّم هذا المقال نقديًا ويفحص بشكل تجريدي عملية الفهم والتكيف مع الانتشار السريع لنظم الذكاء الاصطناعي العابرة للحدود. وقد أدى هذا الانتشار إلى إعادة النظر في المفاهيم والمقاربات النظرية التقليدية المفسرة للتحولات العالمية المتسمة بالاضطراب وقلة التنسيق بين الوحدات الفاعلة، فضلاً عن التحول في مجال الهيمنة بين القوى المؤثرة في النظام العالمي. تعتمد الدراسة على إطار علمي منهجي للإجابة على إشكالية البحث من خلال اختبار فرضية حول تأثير نظم الذكاء الاصطناعي كحقل للهيمنة العالمية. توصلت النتائج إلى الكشف عن المفارقات وتقليل الفجوات بين الجوانب النظرية والتطبيقية.

لمات مفتاحيّة

الذكاء الاصطناعي؛ الردع؛ الشركات التكنولوجية؛ الهيمنة؛ الابتكار

Résumé

En tant que fondement conceptuel, théorique et procédural à plusieurs niveaux, cet article évalue de manière critique et examine de façon abstraite

le processus de compréhension et d'adaptation à la propagation rapide des systèmes d'intelligence artificielle transfrontaliers. Ce phénomène a conduit à une réévaluation des concepts et des approches théoriques traditionnels pour expliquer les transformations globales marquées par des perturbations et un manque de coordination entre les unités actives, ainsi qu'un changement dans le domaine de l'hégémonie entre les forces actives du système mondial. L'étude repose sur un cadre scientifique systématique pour répondre à la problématique de recherche, en testant une hypothèse sur l'influence des systèmes d'intelligence artificielle en tant que domaine de dominance mondiale. Les résultats mettent en évidence des paradoxes et réduisent les écarts entre la théorie scientifique et l'application pratique.

Mots-clés

Intelligence artificielle, Dissuasion, Entreprises technologiques, Hégémonie, Innovation