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Editor

AI, Information, and Global Dynamics

Shaping the Future of Geopolitical Landscape



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Introduction

In the era of AI-driven information, the intersection of AI and information is a key component of geopolitical dynamics. This intersection widely influences the transition to a multipolar world order based on a new balance of power, ranging between geostrategic interests and the race for technological sovereignty. From education to the military, AI-driven information is transforming all sectors and deeply influencing the interaction between humans and AI. Trends related to AI and information will certainly increase new types of power, particularly the combination of AI and information power. AI-driven information is revolutionizing all dimensions of international relations, from economic interactions based on information and data to AI diplomacy, where information is considered the new oil. The military is also revolutionized considering the weaponization of both AI and information in a global landscape characterized by new wars and new weapons. Furthermore, given the significant role of information in hard, soft, and smart power, this revolution increases the diffusion of power, which is not limited to great states. Small states and non-state actors are also competing for power in international society. This competition imposes serious risks, particularly from non-state actors, especially transnational ones, who possess AI technologies and information. This raises the race for technological sovereignty first between states, and second, between states and transnational corporations.

From the Middle East to Europe, and from the wars in Syria and Gaza to the war in Ukraine, AI and information have been used as a new “weapon” that significantly contributed to the new balance of power and the geostrategic changes in these regions. From map wars to ocean and international crossing wars, the weaponization of AI and information is influencing geopolitical dynamics and changing both geographic borders and the balance of power. The weaponization of AI and information is altering the meaning of power and other notions like geopolitics, with the emergence of new types of power such as information power and AI power. The weaponization of AI and information is a key element for understanding and predicting the future of the economic conflict between the US and China, which could escalate to war after the end of the war in Ukraine. In this conflict, AI and information serve as both

a “weapon” and a goal, as the conflict is based on the race for technological sovereignty, which depends on the ability of the US or China to become the global leader in AI, innovation, and science—all of which are grounded in information and knowledge.

The weaponization of AI and information is facilitating the shift from a unipolar to a multipolar world. A complex and controversial characteristic of the new world order arises from the augmented role of AI-driven information. Understanding the tangible and intangible impacts of these technologies in terms of geopolitical dynamics represents a significant challenge for researchers, diplomats, and policymakers. Therefore, this book, titled “AI, Information, and Global Dynamics—Shaping the Future of Geopolitical Landscape,” aims to provide a scientific contribution to the global debate on the interactions among the three elements of AI, information, and geopolitical dynamics. In it, the editor and the contributing authors examine how the powers of AI and information are reshaping geopolitical dynamics now and, in the future, within the context of the transition from unipolarity to multipolarity. Fundamental new notions, such as the geopolitics of AI and information, as well as the power of information, the weaponization of AI, and information warfare, will be discussed in this volume through the lens of several theories, ranging from information and computational science to geopolitics, international relations, and international law.

This volume aims to achieve the following five core objectives:

1. The first goal is to provide tools and methods to understand the intersection between AI and information, and how this intersection has emerged as a critical strategic asset, fundamentally reshaping the geopolitical landscape and global power dynamics. It will explore the intersection of the powers of AI and information to provide a comprehensive understanding of the global landscape.
2. The second objective is to explore the weaponization of AI and information, examining its role as a transformative tool that redefines the nature of modern conflict and military strategies. This includes a close look at AI’s malicious use in disinformation campaigns, psychological warfare, and intelligence gathering.
3. The third goal is to analyze the risks and threats posed by AI-driven information, including through social media, to international psychological security and geopolitical dynamics. The book will investigate how the emerging frontiers between AI and information can be leveraged to manipulate public opinion and create internal instability within nations to achieve geostrategic interests.
4. The fourth goal is to investigate the economic transformation driven by AI and information and assess how this shift is leading to a new balance of global economic power and a new world economic order. It will examine the rise of information-based economies as a new step toward multilateralism, with closed borders and an open society regarding data.
5. The final objective is to analyze the complex challenge of balancing control and security, including maritime security, in the era of AI-driven information. This volume will identify an AI governance framework based on ethics, regulation, and policy actions adopted by international and regional institutions and by

states in the global North and South. The book will explore the geopolitics of AI ethics and regulation concerning technological sovereignty.

Methods

Given the complexity and interconnectedness of AI, information, and geopolitics, no single method would be sufficient. A multidisciplinary view and a multi-methodological approach are crucial to achieving the book's goals.

To that end, we employ an interpretive and comparative framework that systematically combines legal, doctrinal, political, economic, technological, transnational, and prospective approaches. The analysis is built upon a four-dimensional analytical framework. First, it explores the conceptual evolution of AI and information warfare, establishing a clear and coherent theoretical foundation. This step is crucial for framing the book and ensuring it avoids merely reiterating existing literature.

Second, the book examines the geopolitical and strategic implications of AI-driven information by state and non-state actors from both the global North and South. This comparative approach highlights the different national doctrines and strategic priorities currently in play. This comparative approach is complemented by the political analysis to measure the impact of AI-driven information on geopolitical dynamics.

Next, a doctrinal approach is adopted to review the existing laws, regulations, and scholarly literature in the field of AI, as well as the challenges related to international law. The transnational approach is applied to measure how AI-driven information influences non-state actors and individuals during information and psychological warfare, in AI diplomacy, during economic and trade warfare, or even as targets of AI autonomous weapons during war. A technological approach is employed to understand how AI and its evolution influence technical information. Institutional analysis is the most adequate method for understanding the management of AI's implications on information in cases like China, considering the interconnection between the local and global. The prospective approach is used to analyze the challenges related to trends in AI-driven information.

A multidisciplinary approach is evidenced by the points of view presented in this book by authors from various fields of research, such as information sciences, international relations, international economic law, international maritime law, public law, journalism, and communication. In this book, we present viewpoints from both globally recognized experts and young researchers, from practitioners and the academic world.

Additionally, a case study serves to evaluate how the use of AI-driven information influences global debates on AI, information, geopolitical dynamics, and the future of the global landscape. The qualitative case studies are drawn from distinct geopolitical contexts, particularly from the global North and South, with a focus on powerful states like the US, China, the EU, Russia, Japan, and India. The aim is to

show the trends and challenges of contemporary AI approaches linked to media (communication and journalism) and their implications for international security from various theoretical perspectives and paradigms.

The combination of these diverse approaches facilitates the transition from theoretical analysis to practical application, offering a comprehensive and well-supported argument on each of the core objectives.

Chapter 1 provides a foundation for the analysis presented in the following chapters. It is dedicated to the conceptual framework and the intersection between AI, information, and geopolitical dynamics. It demonstrates that AI is not only a tool but also a transformative paradigm in how great powers compete for global leadership in this new multipolar world order, particularly through the weaponization of information and AI.

This first chapter represents a comprehensive analysis of the complex interactions between artificial intelligence, information, and geopolitical dynamics. As AI and information influence other key topics related to the title of this volume, the following chapters will cover essential elements for understanding their implications and developing appropriate responses. The framework presented here provides a foundation for such analysis while acknowledging the inherent uncertainties and complexities involved in predicting future developments in this rapidly changing field.

Viktor V. Zinchenko, Mykhailo I. Boichenko and Iryna I. Drach explain that understanding the intersection between AI-driven information and geopolitical dynamics should consider the mutual influence of AI and humans, observed at three levels:

1. The micro level, referring to interactions between AI and individuals (Chap. 2).
2. The intermediate level, encompassing corporations, regions, and national societies (Chap. 2).
3. The global macro level, considering that “the global dynamics of power is largely determined today not so much by competition between the world’s states or global transnational corporations, including those that produce AI, but by competition between democratic and authoritarian styles in introducing AI into social processes—production, policy, cultural projects, etc.” (Chap. 2).

The authors of Chap. 3, Carlos Enrique Fernández García and Ciencias Humanas, explain how AI and information represent a new battlefield for technological superpowers, considering the role of media in the context of information warfare. Both traditional and digital media are seen as platforms for strategies and tactics to achieve geopolitical interests (Chap. 3).

Sergey Davydov and Anna Kartasheva, authors of Chap. 5, explain how the combination of AI and information in both media and social media “makes information warfare more powerful,” considering AI’s implications for the promotion and dissemination of ideology and propaganda. They also note that these advanced technologies create new risks, such as automation bias and other vulnerabilities specific to AI-driven processes (Chap. 4).

Marta N. Lukacovic and Deborah D. Sellnow-Richmond discuss the implications of social media on the global power landscape, examining how generative AI and algorithms are increasing the role of social media not only in decision-making but also in their implications for the psychological security of individuals, communities, and especially international psychological security (Chap. 5).

This leads us to the growing importance of AI in offensive and defensive information operations, as argued by Hajji Said in Chap. 6. He explains how AI-driven information is reshaping “the logic, speed, and scope of influence operations, eroding the boundaries between ‘times of war’ and ‘times of peace,’ between physical and digital space, and between fact and manipulation” (Chap. 6).

In this context, Pavel Sharikov argues that “AI is no longer a supplementary tool but a pivotal driver of military innovation, influencing not only tactics and capabilities but also the very principles of strategy formulation” (Chap. 7). This chapter is dedicated to explaining how AI and information have become pivotal powers in modern military strategy. It highlights how the intersection between AI and information is reshaping hard power—not only as a notion but also as tools, strategy, goals, and the legal framework, which should be updated to address current and future challenges related to AI-driven information and the military.

From the military to the economy, a key feature of the era of AI is the shift to a new economic world order. This shift is illustrated, according to Viktor V. Zinchenko and Mykhailo I. Boichenko, authors of Chap. 8, by the “economic value which is created not through traditional factors—labor, capital, or natural resources—but through the capacity to collect, store, analyze, and monetize data” (Chap. 8). This leads us to another key actor in Industry 6.0: transnational corporations.

According to Rossana Soriano, “AI is capable of learning to identify patterns, turning information into strategic intelligence, and some industries are turning information into strategic assets.” To illustrate this idea, Rossana Soriano selected several case studies from multiple sectors—encompassing media, finance, e-commerce, and healthcare (Chap. 9). This leads us to maritime security, considering that “more than 90% of global trade is transported by sea,” as stated by the author of Chap. 10, who discusses AI’s transformation of maritime security and its implications for global trade. According to Zaeem Mehmood, AI and information management could “secure critical maritime infrastructure amidst trade wars, cyber threats, and escalating great power competition” (Chap. 10).

International security, including psychological, information, and maritime security, depends on international instruments on AI ethics, as well as regional and national regulations and strategies. AI ethics and regulations are discussed transversally in all chapters of this volume, as well as in Chap. 11, which is dedicated to the global landscape of diverse approaches related to AI ethics, regulation, and strategies concerning the ethics of AI, information, and geopolitics. The chapter first discusses international instruments on AI ethics, including the recommendations on AI ethics adopted by UNESCO in 2021, and the resolution adopted by the United Nations General Assembly on AI and sustainable development in 2024. Next, the chapter covers regional instruments, particularly the European AI Act,

the Continental AI Strategy adopted by the African Union in 2024, and the BRICS AI strategy. Finally, the chapter discusses diverse approaches adopted by several countries from the global North, focusing on the major technological powers, and the global South, emphasizing that the race for AI ethics and regulation is not only a legal response to AI challenges but also a vital component of geopolitical power.

The last chapter of this volume is dedicated to the future of geopolitical strategies, which will be based on the power of AI and information. According to Marius Vaccarelu, the author of this chapter, soon only national political leaders who are “capable of passing the ‘data quantity test’ will be able to remain in the ‘laboratories where geopolitical strategies are conceived’” (Chap. 12).

In conclusion, AI combined with information will revolutionize geopolitical dynamics, starting with how AI and information transform the balance of power at the micro, intermediate, and global macro levels, and how the intersections of these three parameters included in the title of this volume are changing regulations, strategies, policies, actors, and the tools used for peace or war.

Ultimately, the transformation of geopolitical dynamics by AI and information technologies represents both an opportunity and a challenge for the international community. Harnessing these technologies for beneficial purposes while managing their risks will be one of the defining challenges of the twenty-first century. Success in this endeavor will require new forms of thinking, cooperation, and governance that can adapt to the realities of an AI-driven world while preserving the values and institutions that have underpinned international stability and prosperity.

The stakes of this transformation are high. The nations and international institutions that successfully navigate these challenges will be well-positioned to shape the future of international relations and global governance. Those that fail to adapt may find themselves increasingly marginalized in an international system where AI and information power determine the future of geopolitical dynamics. The choices made today about how to develop, deploy, and govern AI, and the way states use information power to achieve their national interests, will have profound implications for the future of international relations and the new world order.

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