**Generative AI shapes the new logic of international gaming**

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Since the release of ChatGPT, generative AI has become a new advancement in the development of AI, bringing about a new generation of human-computer interaction revolution. At the same time, generative AI encompasses the most core competitive elements of the digital age, such as computing power, algorithms, and data, triggering a new round of all-round technological competition among major powers. Historically, the rise of major powers is inseparable from technological innovation, and the focus of power games between countries often changes due to scientific and technological progress. The development of new technologies in the context of globalization often also brings global risks. Therefore, generative AI not only reshapes the logic of national power games, but also brings new challenges to global governance.

**From enabler to collaborator**

　　At present, the most obvious leap of artificial intelligence technology is the development from analytical to generative. Traditional artificial intelligence presents the role of "enabler" and performs well in data collection, management and analysis. Generative artificial intelligence plays the role of "collaborator", which is mainly reflected in the improvement of efficiency and the increase of personalized services in current practice. On the one hand, generative artificial intelligence accelerates value creation in key areas such as writing, innovation and R&D in the form of content analysis and providing creative ideas. On the other hand, generative artificial intelligence provides personalized choices to customers by aggregating market data, and provides immediate and personalized responses based on customer preferences. This feature has begun to appear in the medical industry. By analyzing patient medical records, laboratory results and previous medical data, generative artificial intelligence can help medical personnel make accurate diagnoses and propose further treatment plans, or combine health indicator data with generative artificial intelligence algorithms to provide users with tailored suggestions and treatment plans. Personalized services may become a major change in the development of various industries after the popularization of generative artificial intelligence.

**Reshaping the logic of power games between countries**

　　Every technological advancement will trigger a "butterfly effect" in the field of international relations. The development of navigation technology led mankind into the Age of Discovery. The two industrial revolutions greatly promoted the development of productivity. The power game between Western powers was carried out in the form of competing for overseas colonies, and the international system expanded from Western Europe to the world. The third technological revolution broke the traditional geographical division. The power game between countries no longer focused on the military contest of territorial space, but paid more attention to the competition for the global market. As a key area of ​​the digital revolution, generative artificial intelligence reshapes the power game between countries.

　　First, the elements of power competition between countries have changed, and generative artificial intelligence has become a basic power element. On the one hand, generative artificial intelligence is embedded in various scenarios and demonstrates different powers. The major innovation represented by generative artificial intelligence not only creates new value for the country, but also increases the relative value of existing resources. Countries have joined the competition for generative artificial intelligence, and the increasingly fierce global competition for large-scale model research and development is due to the fear of losing the entire market. On the other hand, the foundation on which generative artificial intelligence relies, namely computing power, algorithms, data, etc., have become the most core competitive elements in the field of digital competition. The mastery of these competitive elements has become an important factor in evaluating national power in the digital revolution.

　　Secondly, power in the competition of generative artificial intelligence is more easily monopolized. Generative artificial intelligence is a technology-intensive and capital-intensive industry, and its competitive advantages are increasingly concentrated at the top of the power of the international system, which is followed by the monopoly of structural power in the international system. The generative artificial intelligence ecosystem includes the infrastructure layer, the model layer and the application layer, and innovation and competition are rising at the same time at these three levels. Taking the competition at the infrastructure layer as an example, the core of its competition is computing power, and the core of computing power is chips. The rapid development of generative artificial intelligence has brought about a high concentration of market demand for AI chips. Among them, Nvidia A100/H100/GPU has a market share of 90%. As two other key nodes in the global chip supply chain, ASML's EUV lithography machine has a global market share of 100%; TSMC, the world's largest chip foundry, has a market share of more than 60%. In the capital market, the threshold for chip production, large model development and training is extremely high, and generative artificial intelligence-related industries are continuing to attract a large amount of financing. The "snowball effect" of technological monopoly and capital has made developed countries and large high-tech companies increasingly concentrated in their monopoly of structural power.

　　Finally, the development of generative AI has changed the way countries create power and their motivations for exercising power. The development of generative AI not only provides convenience for users and enterprises, but also has the ability to change the way countries pursue survival and development. Before the Industrial Revolution, countries gained security and wealth by conquering territories; after the Industrial Revolution, countries used machines to improve productivity and pursued the growth of power; during the Cold War, the narrative of national power was rooted in the instability of state behavior brought about by nuclear weapons. As technological changes have reshaped the way countries achieve their ultimate goals, modern countries almost no longer regard direct territorial expansion as a way to increase power. From the perspective of production structural power, it is the monopoly of developed countries and their large high-tech companies in the fields of technology and capital that makes it easier for them to "weaponize" the dependence of other countries. The "decoupling and chain-breaking", "choking the neck" and "small courtyard high wall" actions taken by the United States against China in the high-tech field are essentially to contain China with its advantages at key nodes of the global supply chain. From the perspective of knowledge structural power, deep learning brings the illusion problem of large models, generates misinformation, false information, and the risk of prejudice and discrimination, turning the "power war" and "institutional war" that once dominated countries into "cognitive war".

**Governance Difficulties in the Shift of Power Game**

　　Generative AI has ushered in a new era for AI, but it has also brought about a series of governance challenges. From the perspective of the technology itself, the governance challenges faced by generative AI mainly include misinformation, bias and discrimination, alignment problems, abuse risks, and intellectual property rights. AI algorithms have not yet overcome technical limitations in terms of transparency, robustness, bias and discrimination. The black-box operation mechanism of the algorithm model makes its operating rules and causal logic unclear, and it is easily disturbed by factors such as data, models, and training methods, resulting in non-robust characteristics. The algorithm uses data as raw material. If biased data is used initially, these biases will lead to bias or discrimination in the final generated content. Many companies have not yet perfected their risk prediction, prevention, and emergency response capabilities, and the risk governance concept has not been implemented in engineering and technical practices, resulting in the loss of the opportunity to intercept risks in their infancy. They are in a passive state in the complex network security game, and are very likely to cause network information security risks once they are threatened internally or attacked externally. Due to the rapid development of technology, the response time of various countries has been greatly compressed, and the global framework for the governance of generative AI has been slow to be reached. In the absence of historical governance experience, it is difficult to form an effective governance plan in a short period of time.

　　The perspective of "going beyond competition" is the ideal state for dealing with the governance of generative AI, but due to the strong connection between the technology and national power, it is difficult to avoid being involved in the power game between countries. Technology is a double-edged sword. It can bring advantages to innovators, but it may also weaken the status of incumbents by changing the supply "rules" and encouraging new entrants. The important impact of generative AI on national power makes countries cautious about its research and development, use and governance. "Pan-security" is intensifying in the field of digital competition. Global cooperation in the era of great power competition is becoming increasingly difficult to achieve. Geopolitical tensions may force countries to face greater risks. The governance of generative AI has long exceeded the capabilities of a country. The game of power between countries constitutes a dispute over the rules of generative AI governance. The acquisition of national power has gradually deviated from the growth of strength in a single field and tends to pursue opportunities to master the rules. Countries have formulated policies and regulations with their own characteristics for artificial intelligence. Multinational digital companies have to train different models for different regions. In the absence of global coordination, digital companies and their models are difficult to operate smoothly.

　　In October 2023, China issued the "Global AI Governance Initiative", which pointed out the direction for solving the dilemma of generative AI governance. The initiative states: "Countries should strengthen information exchange and technical cooperation in AI governance, jointly prevent risks, form a broadly agreed AI governance framework and standard specifications, and continuously improve the security, reliability, controllability and fairness of AI technology. We welcome governments, international organizations, enterprises, scientific research institutions, non-governmental organizations and individual citizens to uphold the concept of consultation, co-construction and sharing, and work together to promote AI governance." This is China's call against the backdrop of the West's monopoly on the discourse power of global AI governance rules. It proposes a Chinese solution to the vision of global AI governance from the perspectives of goals, subjects and values, and is the practice of building a community with a shared future for mankind in the field of global AI governance.

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