

## **Editors' Introduction**

### *Emerging Technologies and the New Geopolitics of Power*

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The launch of the inaugural issue of *Techade: An International e-Journal on Emerging Technologies and Power Dynamics* marks an important moment in contemporary debates on technology and global politics. This first issue represents not only the beginning of a new academic platform but also a response to a rapidly transforming world in which technological change is reshaping the foundations of power, governance, and international order.

In recent years, emerging technologies have moved decisively from the margins of technical innovation to the center of political and strategic life. Artificial intelligence, quantum computing, biotechnology, digital infrastructures, and data-driven platforms are no longer neutral tools of progress; they have become decisive forces shaping sovereignty, security, economic competitiveness, and social order. These transformations demand sustained scholarly attention that is critical, interdisciplinary, and globally grounded.

*Techade* has been conceived as a space to foster such engagement. The journal seeks to bring together scholars and practitioners across disciplines to examine how technological transformations intersect with questions of power, ethics, and governance. By encouraging dialogue between international relations, political science, technology studies, security studies, and political philosophy, the journal aims to contribute to a deeper understanding of the technological age we inhabit.

### **Technology as the New Grammar of Power**

The twenty-first century has witnessed a fundamental shift in how power is articulated and exercised. Technology, once viewed primarily as an instrument of economic growth or administrative efficiency, has emerged as a central grammar of global power. Algorithms, data infrastructures, and innovation ecosystems now shape strategic advantage, geopolitical influence, and normative authority in world politics.

Emerging technologies are redefining traditional conceptions of sovereignty and security. Control over data flows, computational capacity, and digital platforms has become as significant as control over territory or military assets. States increasingly compete through standards-setting, supply-chain resilience, and technological ecosystems, while power operates through largely invisible architectures—codes, protocols, and infrastructures that structure political and economic life.

This technological turn has also blurred the boundaries between civilian and strategic domains. Innovations developed in commercial or research settings are rapidly integrated into military planning, intelligence operations, and state surveillance systems. Simultaneously, private technology corporations have emerged as powerful geopolitical actors, shaping norms, influencing policy, and controlling infrastructures critical to public life. These developments raise urgent questions about accountability, democratic oversight, and the limits of private authority.

Technology-driven power is also deeply asymmetrical. While some states and corporations possess the capacity to design and govern advanced technologies, others remain dependent on external infrastructures and proprietary systems. Such asymmetries risk reproducing older hierarchies in new digital forms, reinforcing dependency and exclusion under the language of innovation.

## **From Polarity to Technopolarity**

These shifts have given rise to a condition increasingly described as *technopolarity* – a global configuration in which technological capabilities, digital infrastructures, and innovation ecosystems determine strategic hierarchy. Unlike classical models of polarity centered on military or economic strength, technopolarity emphasizes control over data, platforms, standards, and critical infrastructures.

Power in this order is not monopolized by states alone. Technology corporations and platform providers exercise forms of authority that rival governmental power. Decisions regarding data governance, algorithmic design, or content moderation can have profound geopolitical and societal consequences. As a result, authority is dispersed across networks of public and private actors, producing a fragmented but deeply interconnected global order.

Technopolarity also reshapes strategic competition. Semiconductors, cloud infrastructure, undersea cables, and digital payment systems have become strategic assets, while export controls and industrial policy are deployed as instruments of statecraft. Competition over standards – from AI governance to cybersecurity—reflects deeper struggles over whose values will shape the digital future. At the same time, these dynamics intensify inequalities for states lacking technological capacity or infrastructural autonomy.

## **Ethics, Governance, and Justice in the Digital Age**

The diffusion of emerging technologies has intensified ethical dilemmas and governance challenges. As algorithmic systems increasingly mediate social interaction and political decision-making, questions of accountability, transparency, and justice become central.

Surveillance technologies and data-driven governance raise concerns about privacy, consent, and power asymmetries. The commodification of personal data—often described as surveillance capitalism—promises efficiency while eroding individual autonomy. Algorithmic bias, opaque decision-making, and weak regulatory oversight further complicate efforts to ensure fairness and inclusion.

Governance frameworks struggle to keep pace with innovation. Regulatory regimes remain fragmented and largely national, while technologies operate transnationally. The absence of shared global standards allows powerful actors to shape norms, often marginalizing weaker regulatory systems. Addressing these challenges requires moving beyond market-driven approaches toward frameworks grounded in ethics-by-design, public accountability, and participatory governance.

## **The Global South and India's Digital Moment**

Debates on technology and power must extend beyond technologically advanced states. For much of the Global South, digital transformation presents both opportunity and risk. While digital technologies offer possibilities for inclusion and developmental leapfrogging, they also risk reproducing dependency through externally controlled platforms and infrastructures.

India's experience offers a significant case. Initiatives such as Digital Public Infrastructure and India Stack demonstrate how technology can be designed around openness, interoperability, and public purpose. These models challenge proprietary platform governance and suggest alternative pathways for digital inclusion without surrendering sovereignty. Yet they also highlight tensions related to data protection, surveillance, and exclusion, underscoring the need for robust institutional and ethical oversight.

By foregrounding Global South perspectives, this issue seeks to decenter dominant narratives of technological progress and promote plural approaches to digital governance rooted in diverse social realities.

### **Scope and Vision of the Inaugural Issue**

The inaugural issue of *Techade* is conceived as an interdisciplinary space examining the geopolitics of emerging technologies. Rather than treating technology as a purely technical domain, it situates technological change within broader political, ethical, and strategic contexts. The contributions reflect a shared commitment to critical inquiry, theoretical rigor, and empirical engagement.

This issue does not seek definitive answers but opens space for sustained debate and reflection. By engaging both global and Global South perspectives, it underscores that the governance of emerging technologies must be grounded in questions of justice, sovereignty, and democratic accountability.

### **Looking Ahead**

As *Techade* moves forward, it aspires to become a sustained forum for critical engagement with the political and ethical dimensions of technological change. The journal is committed to inclusivity, methodological diversity, and high editorial standards. Ultimately, *Techade* seeks to function not merely as a repository of research but as an active intellectual space shaping more equitable and responsible technological futures.

### **Concluding Note from the Editors**

The publication of this inaugural issue marks the beginning of *Techade* as a scholarly endeavour dedicated to critically examining the intersections of emerging technologies and power. We hope the discussions initiated here will inspire further debate and contribute to more informed and inclusive conversations on technology and society.

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