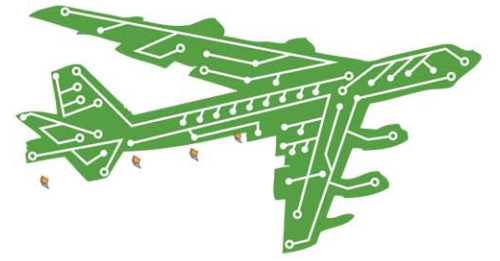


By Invitation

Technopolitics: The digital revolution and return of great power rivalry



If nuclear arms symbolised the Cold War confrontation between the United States and the Soviet Union in the 20th century, the digital revolution has become the signifier of great power contestation in the 21st century



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In the early days of the digital revolution two decades ago, there was enormous optimism about its social, economic and political benefits. The new information and communication technologies, it was hoped, would promote individual freedoms, bring down the barriers between nations and create a networked international society at peace with itself. That optimism has begun to fade as the new technologies sharpen old divisions and trigger new fault lines within nations and among them.

The fond expectation that the Internet would liberate individuals from oppressive governments has turned out to be false. Instead, the digital revolution has allowed states to mount unprecedented monitoring of the citizenry. As digital technologies empower states to assess human behaviour, physical as well as emotional, the prospect for an all-knowing surveillance state is at hand.

It is not just governments that continuously observe citizens. While governments can claim that they monitor individuals for the sake of collective security, the corporates are doing it for profit. In a veiled warning in October against Google and Facebook that collect and monetise consumer data, Apple's Mr Tim Cook pointed to the emerging dangers from a "data-industrial complex" that is "weaponising" routine information with "military efficiency".

The growing intrusive capabilities of the state and the corporations have stirred the civil libertarians to demand the right to individual privacy and anonymity. The European Union's lead on establishing guidelines for data protection are now being emulated across the world. But not everyone is sure that individual freedoms can be restored to the levels enjoyed in the pre-digital age.

STATE POWER ENHANCED

What is unmistakable, though, is the fact that the state is back. Gone is the notion that the digital revolution will diminish the power of the state. Instead, it has made the state more powerful. Even as states expand their power vis-a-vis their citizens, they are also locked in conflict with other states.

The origins of the digital revolution coincided with an exceptional period of international relations at the end of the 20th century – a period of relative harmony among major powers. The collapse of the Soviet Union and the integration of China into the global economic and political order seemed to herald an era of ever deeper economic interdependence among major powers and few incentives for contestation.

That illusion of the march towards a multilateral world, however, did not last long. By the second decade of the 21st century the rivalry among the great powers was beginning to congeal. The United States' relations with both Russia and China began to deteriorate and the hopes for a new cooperative global order were replaced by the reality of geopolitical competition.

In Central Europe, the understandings between the West and Russia after the fall of the Berlin Wall in 1989 began to break down two decades later. Moscow complained about the expansion of Nato to the East, towards Russia's borders. Washington vented against Moscow's effort to reconstruct its sphere of influence on its vast periphery.

In Asia, the rapid accumulation of Chinese economic and military capabilities and Beijing's assertiveness began to threaten America's long-standing primacy in the region and undermine the post-war alliances of the US in the region. While the regional issues are important in the new rivalry, technology has acquired a prominent place in the negative dynamic between the US, on the one hand, and Russia and China, on the other.

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become the signifier of great power contestation in the 21st century.

'RULER OF THE WORLD'

Russia's President Vladimir Putin sharply summed up the situation in the autumn of last year. Addressing Russian students about the importance of the digital revolution, especially the advances in artificial intelligence (AI), Mr Putin said, it "comes with colossal opportunities, but also threats that are difficult to predict. Whoever becomes the leader in this sphere will become the ruler of the world".

Since the late 2000s, America has grumbled against Russia's cyber attacks that were first noticed in Estonia (2007) and Georgia (2008) and have become pervasive since then. But few had expected that Russia would be charged, seriously, of interfering in the US elections.

The 2016 US presidential elections turned out to be a close affair. The Republican candidate, Mr Donald Trump, lost the popular vote but won the electoral college. His rival, Mrs Hillary Clinton, blamed Russian interference for the defeat. The Democratic Party accused the Russian government of manipulating the outcome in favour of Mr Trump through fake news and the promotion of politically polarising content on social media, such as Facebook and YouTube.

Whether the Russian role was decisive in shaping the final outcome or not, few doubt Moscow's effort to meddle in the elections. For many, the US allegations on Russian interference underline an ironic twist in the global debate on the weaponisation of the social media.

When Mrs Clinton was the US Secretary of State during 2009-2013, it was Moscow that accused her of trying to use the Internet to weaken Russia and counter its influence in the former Soviet Republics. Mrs Clinton's "Internet freedom project" was based on the premise that the digital revolution would help promote democracy and political pluralism in closed societies. Quite clearly, digital politics is a double-edged sword.

For much of the world, the real problem is about the growing power of one state to exploit digital technology to interfere in the domestic affairs of another. While major powers can defend themselves against such meddling, most nations will find it hard to cope with the ability of hostile actors to destabilise their societies.

Technology is playing out very differently in the rivalry between the US and China.

Beijing was quick to erect a Great



Wall to secure its "digital sovereignty" against America and the West. Even more important, China has begun to invest massively in technologies like AI with the clear aim of becoming a global leader.

The US has pushed back. While the focus has been on tariffs and trade, America's real concern has been about the prospect that China might end America's global technological leadership and, with it, the longstanding US economic and political primacy in the world.

The US has long accused China of stealing the intellectual property relating to advanced technologies in the US and using its companies for espionage. The American objection is not against Chinese spying in general. The US concedes that political espionage is as old as statecraft. Washington argues that China's expansive espionage deliberately targets America's technological wealth, its economic well-being and its open political structure.

The argument came to a head late last month when the Canadian authorities arrested, at the request of the US, Ms Meng Wanzhou, the

heir-apparent to the Chinese telecom and technology giant Huawei, for suspected circumvention of American sanctions against Iran. The US is mobilising all the Western powers to ban Huawei from selling telecom equipment for the planned 5G networks.

TECH ARMS RACE

The US is worried that letting Huawei build 5G networks in the West would hard-wire Beijing's advantages in the next round of digital advances – especially in the Internet of Things – and strengthen China's espionage capabilities. More broadly, the US is considering significant controls on the export of what it calls "foundational technologies" to China. Whether it will slow down Beijing or not, the US-China technological wars are here to stay and will impact all nations, big and small.

In the atomic age, the US and the Soviet Union competed with each other in building massive nuclear arsenals; but they also collaborated in the construction of regimes of mutual restraint and global norms against the misuse of the nuclear

and space technologies. The unstable structure of competition and cooperation is also coming into view in the digital arena.

The US, China and Russia have led global efforts to build expansive offensive and defensive cyber capabilities. They are now locked in an incipient race to leverage AI for purposes of war. But the efforts to limit the misuse of these technologies are not encouraging at the moment.

At the bilateral level, a 2015 agreement between President Barack Obama and President Xi Jinping to stop targeting commercial entities has turned out to be ineffective.

At the global level, the campaign by civil society groups to ban "killer robots" has not won much political traction from governments despite widespread fears that the weaponisation of AI could lead to the very destruction of humanity.

The concerns about human survival are similar to those that have endured through the atomic age. But, unlike nuclear and missile technologies, the impact of the digital revolution on the political economy, social organisation and global politics will be far more sweeping.

POWER AND SMALL STATES

All technological revolutions before contributed to the redistribution of power, thereby altering the hierarchy and structure in the international system. Those powers able to get a head start in mastering the new technologies went on to set the rules for their global management. For the late comers, it is a continuous struggle to adapt.

The dominance of the US, China and Russia in the current debate on the digital revolution does not mean that the smaller states must remain passive.

For all the daunting challenges, smaller states can generate some political agency by embracing technological innovation, mediating between competing imperatives of collective security and individual freedom, collaborating with like-minded states and participating actively in the debates on the global governance of the digital revolution. Indigenous technical capabilities and policy competence hold the key for small and medium powers to sustain freedom of action in the digital age.

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