

The Digital Silk Road: China's Quest to Wire the World and Win the Future

By Jonathan E. Hillman
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Reviewed by Walter M. Hudson



The Digital Silk Road is Jonathan Hillman's hi-tech companion to his book *The Emperor's New Road: China and the Project of the Century*, published in 2020, which dealt with the vast Chinese Belt and Road Initiative (BRI), the largest developmental project of our time. The Digital Silk Road (DSR) is the BRI's high-tech portion, its transoceanic fiber-optic cables and its space-based satellite chains every bit as much a part of the BRI as a railroad project in Africa or port construction in South Asia. And like the BRI, the DSR's goal is global and hegemonic: in establishing it, China intends to be the world's "indispensable hub and gatekeeper" of the digital space.

The first part of Hillman's book deals with the sad and sorry tale of how China used digital technology to secure control within its own borders. He refers again and again to a key conceit that, until very recently, was prevalent among American policymakers and foreign affairs specialists—that technology is an "enabler" to democratic norms, and that there is a direct correlation between the expansion of technology and the expansion of human freedom. But this is a dubious trope that has passed for insight, an example of what the economist and

social scientist Albert Hirschman calls the "all good things go together" rhetorical conceit, especially prevalent among political liberals (conservatives have their own stock of conceits). The notion that technology enhancement leads to the establishment of democratic norms, that technology and democracy "go together" *feels* right. There is a version of history that lends weight to this. But human history is, after all, a sequence of dependent variables: the notion that technology enables democracy cannot be axiomatically true. Rather, better and more safely put, technology is politically neutral.

Hillman writes, as the digital age dawned in the 1990s, "Techno-optimism approached techno-evangelism." Technology brought to China would liberate China. That China happened to be the most lucrative untapped market on earth was a happy coincidence. Sweeping pronouncements were made: "[The internet] cannot be controlled... [it] will help connect the Chinese people to the rest of the world like never before." Anyone with an even glancing familiarity with the history of autocracies should have challenged such foolish utopianism. Few of any consequence apparently did. After

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March 31, 1994, the export controls that prevented high tech exports of telecommunications equipment to China vanished and “[t]he race to connect the world’s most populous country was on.” Respected private and public sector elites on both sides shared in this technocratic fantasy. Nortel executives in the 1990s thought that China’s rise, the planet’s well-being, and (of course) Nortel’s profits were linked together. True believers included not just Clinton-era liberals, but people such as Frank Carlucci, a former Reagan Defense Secretary and National Security Advisor.

Surely at a certain point—say by around 2000—it should have been apparent what was going on: namely that U.S. tech companies were helping the Chinese Communist Party (CCP) build a massive surveillance state within its borders. What makes the story amazing is that the CCP did not hide its intentions. In 2000—not 2010 or 2015—Chinese officials clearly indicated they were creating a digital “Golden Shield,” a massive surveillance and data collection network for the ultimate panopticon state. Technology did not bring freedom to China: the advantages did not go to pro-democracy dissenters but to the state, which established social credit systems, censored, and overwatched virtually all aspects of its citizens’ lives.

Did U.S. tech companies balk at this? Hardly. As Hillman puts it, “They scrambled for a piece of the action.” Corporate lobbyists deluged U.S. lawmakers to open China further. Nortel and Motorola senior executives waxed on about how China’s possible accession into the World Trade Organization would benefit the United States, as well as their companies’ profits, their workers, and democracy worldwide. (NB: these companies no longer exist, bankrupted in no small part due to the Chinese companies they helped bring to prominence.) Western companies poured into China and helped give China access to the latest high technologies that would allow it to establish the largest

and most elaborate social monitoring network ever devised. And these were not simply technology transfers: Chinese firms spent huge sums learning the latest in Western management methods. Huawei, for example, spent well over \$1.5 billion between 1997 and 2012 acquiring best business practices from U.S. consulting firms.

China subsequently turned to spreading its digital influence globally. Hillman shows how U.S. policies aided Huawei’s move into worldwide markets in the early 2000s. Perhaps most troubling is that in Iraq American blood and treasure helped facilitate it: the U.S.’s destruction of Iraqi telecommunications during the 2003 invasion left a void that Huawei readily filled. In 2007, while Western companies eyed Iraq with circumspection, Huawei secured a \$275 million contract for wireless services in the country, and later did something similar in Afghanistan. As Jon Alterman, a Middle East scholar whom Hillman references, painfully points out, the United States was fighting but not winning in the Middle East; the Chinese were winning but not fighting.

China’s rise in digital expertise and in the digital business ecosystem is astonishing. China is not only the technological “biggest of big brothers,” it is also now the biggest provider of digital technology in the world. Huawei operates in 170 countries. It has created 70 percent of the current 4G network in Africa. Beidou provides more satellite coverage over the world’s capitals than American GPS. Hikvision and Dahua provide almost 40 percent of all the world’s surveillance cameras. Hikvision, which largely set up the surveillance camera system in China, has a considerable chunk (12 percent) of the North American market as well, which until Congress imposed restrictions in 2018, included Peterson Air Force Base. And just like the British Empire did with its “All Red Routes” of undersea telegraph lines, Chinese companies are laying vast amounts of subsea fiber-optic cables, with over a

hundred ongoing projects. Technological blunders, cost overruns, and mismanagement abound, yet the projects continue and expand.

Hillman has done commendable work in tracking China's global digital infrastructure project, not just in Africa, Asia, and Latin America, but in places such as Glasgow, Montana, an isolated East Montana town where Huawei equipment takes its calls. Glasgow is as patriotic as one would expect an American small town would be, but many residents are simply unaware that their phone calls and internet connections have been provided by a Chinese company. And frankly, as in many other places, people want reasonable bills and ready connectivity, regardless of a provider's national origin. Hillman very capably analyzes this American rural/urban "digital divide." Rural communities are separated by wide distances and need reliable and affordable digital connectivity, especially for emergency situations, more often than urban ones. Yet quite often these more isolated and less affluent communities are the ones most readily forgotten. Chinese firms have been available to meet their needs.

Yet, while Hillman is clear-eyed about the competition and the threat posed by China's DSR, he recognizes that China is not invincible. The DSR is filled with vulnerabilities. For instance, there are real problems with the DSR's space component. This is significant—at least nine countries are in the process of buying communications satellites from Chinese firms. But these nations have suffered major disappointments such as heavy costs and associated engineering, marketing, and service problems. Advanced rocketry and satellites are daunting technological tasks for developing countries, and many of them are experiencing major economic challenges as China's promises are somewhat less than fulfilled. Nigeria, for example, is attempting a space program underwritten by China, but as failures mount, the country seems to be somewhat dubiously doubling down on its space program and plunging

into massive debt as a result. In other areas, China is far from a giant. In cloud computing for instance, Amazon, Microsoft, and Google own half the world's market; Chinese firms such as Alibaba have a much smaller imprint. And U.S. companies still possess the vast overall majority (70 percent) of the world's high-tech wealth. America is not necessarily holding a losing hand.

When it comes to recommendations to counter the DSR, Hillman proposes an alliance—he terms it CORE (standing for a "Coalition of Open and Resilient Economies"), a flexible coalition of technologically advanced and emerging nations. CORE would take the lead on setting digital standard worldwide, provide digital security to prevent Chinese-led tech depredations, and engage and support rising tech hubs "on the periphery." Certainly, there is nothing wrong with taking the lead in setting standards and forming alliances, though alliance formation, in of itself, can have little more than mere talismanic appeal: as Hillman points out, the tech rivalry is turning out to be remarkably bipolar. As mentioned, the United States has nearly 70 percent of the world's digital market capitalization; China has 22 percent, and Europe not even 4 percent. Europe, in other words, may lack the clout to make an alliance a surefire tech silver bullet. And of course, multinational tech corporations themselves wield enormous autonomous power that can cut across international alliance structures.

What about America itself countering the DSR with its own digital development project? Clearly there should be ramped up efforts. However, an all-out U.S. version of the DSR is highly unlikely. Hillman notes that the U.S. International Development Finance Corporation (DFC) and the U.S. Export-Import Bank (EXIM), the two most important U.S. agencies involved in development, are capped at \$195 billion, well shy of the trillions a true "counter DSR" would require. A digital Marshall Plan is not in the political offing.

Nonetheless, there is both vast productivity and potential within the American enterprise system. The problem is that, given our highly complex federalized system, we often don't know what we have at the local, state, and much less the federal levels. A sectoralized, specific underwriting, if not outright championing, of certain efforts could offset, and possibly even undermine the DSR and China's goal for global dominance. What is further needed is a fuller understanding of the respective U.S. and China asymmetries in the hi-tech, digital competition, the kind a thorough net assessment of comparative U.S. and China tech strengths and weaknesses could establish.

Hillman's book is an essential first step in understanding China's DSR challenge. What must follow next is a complete accounting and assessment of our own digital technology capacities—in wireless networks, connected devices, global positioning satellites, cloud computing, in that vast array of cutting-edge innovations that are transforming our nation and the world. Only then can China's challenge be fittingly met. [PRISM](#)