The Long Path to U.S.-China Tech Competition

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Ultimately, nuclear-armed countries will be cautious in their use of force in any competition, which means that power does not come from the barrel of a gun, no matter how technologically advanced that gun may be, but from the persuasiveness of a nation’s ideas.

Competition with the West shapes modern China. The story of this competition begins with China’s last great emperor, the Qianlong emperor (who abdicated in 1796), after rejecting commercial ties with an emerging Great Britain, saying Britain had nothing China needed. It was 153 years before China had another leader strong enough to engage confidently with foreign nations. Mao Zedong reforged China into a single, powerful state, but his ideology ultimately impoverished it. When his successor Deng Xiaoping took power, he found a China that was weak and backward. Deng was determined to remedy this.

China’s ambivalent relationship with the West is built on a long tradition that dates back to Qianlong and the shock of defeat in the Opium Wars. China began to modernize and “Westernize” its economy in the nineteenth century. So did Japan, but while Japan succeeded, China did not make progress until Deng. Deng’s solution was to open China to the West to stimulate its indigenous technology base and commercial capabilities. This was not yet a competition, but the West—particularly the United States—was and is the yardstick by which China measures its progress, comparing the number of PhDs or patents issued and, above all, the size of national incomes.

China’s opening came at a favorable time in U.S. foreign policy. Still recovering from defeat in Southeast Asia, the United States, under President Jimmy Carter and his national security adviser, Zbigniew Brzezinski, saw China as a counterbalance to an assertive and powerful Soviet Union. They began to selectively strengthen Chinese military capabilities, selling, among other things, advanced torpedoes, laser-guided artillery shells, and Black Hawk helicopters, while permitting increased commercial ties. The transfer of military technology ended abruptly with the Tiananmen Square massacre, but commercial ties continued to expand and created a giant and deeply interconnected technology base. Some Americans, seeing China’s rise, even hoped China would become a responsible partner that the United States could guide, much as Great Britain had envisioned itself.
guiding an emerging United States a century earlier. But competition, not partnership, best describes the U.S.-China relationship today.

Ironically (since it was ultimately infeasible), Ronald Reagan’s “Star Wars” Strategic Defense Program frightened China into thinking it would fall behind in technology and never catch up unless it made enormous investments in research and used any means to acquire technology from the West. There is an illicit aspect to China’s growth, given its massive espionage campaigns, its use of intellectual property (IP) theft (something that predates the 1949 revolution), and its predatory commercial practices. China does not respect rules for trade and IP protections. Optimistic Westerners hoped this would change as China matured and adopted global norms of commerce, but China felt that espionage and IP theft were justified by the “century of humiliation” inflicted by European imperialism and by the need to grow to ensure this never happened again.

There are precedents for this competition. The Kitchen Debate between Soviet premier Nikita Khrushchew and then vice president Richard Nixon in 1959 was not over who had the best technology or which country made the best toaster; it was over which economic model—markets or Marxism—performed best for citizens. If the debate were held today, the likely winner would be the European Union, whose citizens receive better services than those provided by either the United States or China. But the strategic focus is on economic growth and innovation, not welfare, and the United States and China see themselves engaged in an intense technological contest.

The 1960s space race is another precedent. Americans panicked when the tiny Sputnik appeared overhead in 1957. The “Sputnik moment” led to massive U.S. investments in science. The Kennedy administration followed this by setting the goal of reaching the Moon first. The benefits of international influence and the military implications of a lunar landing were clear. The immense spending to get to the Moon, combined with the scientific and technical investments made in response to Sputnik, laid the foundations for the U.S. high-tech economy.

The United States had no Sputnik moment with China; in fact, until recently, it had the reverse. In the early 1990s, the United States cut government investments in science and research built up over the Cold War as no longer necessary. For 25 years after the Cold War’s end, the United States coasted, comfortable in its supremacy. It did not regard China as a competitor, even as China embraced competition. China’s rise and the assertive policies of President Xi Jinping have shaken U.S. confidence and ignited competition in many ways centered on technological leadership.

If anything, Xi was premature in proclaiming China’s inevitable rise, as this prompted the United States to reinvest in science and restrict technology transfers to China. China still has one great advantage in the new contest compared to the Soviets. Its deep interconnection with Western economies means it can participate in global markets to sell, buy, and seek financing in ways the Soviets never could. These market connections mean the competition with China is not a replay of the Cold War, where bifurcation between East and West meant there was little exchange of capital or ideas, and Cold War policies, like export controls, will not work as well in this profoundly interconnected environment.

The terms of competition are muddled by analytical shortcomings. There is a tendency among Western analysts to explain complex economic phenomena in terms of a single technology. But a single technology, whether chips or artificial intelligence (AI), does not determine the course of complex and intricately interconnected economies. Just as with the Kitchen Debate or the space race, this is competition between economic models and the political system behind them, not a tech arms race. This competition of models will determine whether China or the United States will be more powerful as a result of the economic growth and technological advances innovation creates.

In this new competition, the United States has many advantages, but it faces a major obstacle. In China, the Chinese Community Party’s desire for control, Xi’s affirmation of Marxism, and the accompanying recentralization of economic activity will inevitably slow China’s growth and its ability to innovate, as will a growing global reaction to China’s
predatory practices. Disarray in Washington does not bode well for U.S. competitiveness, but even a relative U.S. decline does not mean China’s rise. There is more to power than being seen as ahead in technology, and China lacks compelling ideas for global leadership.

But political disarray undercuts U.S. strength. Technology leadership is just one of the global competitions facing the United States: there is one with China, another with emerging, powerful economies that reject the old U.S.-led global order, and one with dogmas on both left and right that undercut the ideas that create the political climate where innovation can flourish. U.S. politics is going through another chapter of the partisan disputes that make Congress dysfunctional, threatening the culture of innovation and science that underpins U.S. strength. American success in a battle of ideas is not guaranteed, and massive defense budgets do not compensate for this. Ultimately, nuclear-armed countries will be cautious in their use of force in any competition, which means that power does not come from the barrel of a gun, no matter how technologically advanced that gun may be, but from the persuasiveness of a nation’s ideas.

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