## **State of Mankind**

How much do you know?

## Excerpts from How the Specter of Communism Is Ruling Our World

(147)

How did China boost its manufacturing and innovative potential in such a short period of time? It used the same old tricks: First, it coerced companies to transfer their technologies, as in the case with high-speed rail. Many Western corporations are willing to provide technology in exchange for access to the Chinese market, training their future competitors at the same time. Second, China demands the companies form joint ventures with its own firms, and supports Chinese companies and universities in collaborating with high-tech companies, so they can acquire such technologies. Third, the regime encourages its domestic firms to make acquisitions of overseas high-tech companies, directly investing in startups with key technologies, and establishing overseas research-and-development centers. Fourth, it induces leading foreign tech and scientific research institutes to set up R&D centers in China. Fifth, it uses targeted policies to bring in foreign technology experts.

Many startups in Silicon Valley need capital. China uses taxpayer money to invest in them in order to get its hands on new technologies, including rocket engines, sensors for autonomous navy ships, and 3D printers that manufacture flexible screens that could be used in fighter-plane cockpits.[42] Ken Wilcox, chairman emeritus of Silicon Valley Bank, said in 2017 that within a six-month period, he was approached by three different Chinese state-owned enterprises about acting as their agent to buy technology on their behalf. Though he declined, he said: "In all three cases, they said they had a mandate from Beijing, and they had no idea what they wanted to buy. It was just any and all tech." [43]

In November 2018, the United States Trade Representative (USTR) published the findings of a Section 301 investigation. The report says that Danhua Capital (currently Digital Horizon Capital) uses China's venture capital to help the Chinese government gain top technologies and intellectual property in the United States.[44]

The above report by the U.S. government is open for the public to see. The killer weapon that China uses to realize its technological leap forward is the blatant theft of Western technology. China's aptitude for industrial espionage far exceeds the scope of commercial spies in the past. In order to steal technology and secrets from the West, the regime mobilizes all

available personnel and tactics — including espionage, hackers, international students, visiting scholars, Chinese and Taiwanese immigrants working in Western companies, and Westerners lured by monetary interests..

The CCP has always coveted the US F-35 stealth fighter jet. A Canadian permanent citizen, Su Bin from China, was sentenced to five years in prison for stealing F-35 secrets in 2016. Su worked with two hackers from the Chinese military, penetrating the computer systems of Lockheed Martin, the manufacturer, and exfiltrating secrets. The group also stole secrets related to the F-22 stealth fighter. Investigation found that Su's group had also stolen secrets about Boeing's C-17 strategic transport aircraft, and 630,000 files from Boeing's system, totalling some 65 gigabytes of data.[45] The PLA's own J-20 stealth fighter exhibited in recent years is now very similar to the American F-22, and the smaller Chinese FC-31 is an imitation of Lockheed's F-35.

Dr. David Smith, a Duke University metamaterials expert, invented a kind of invisibility cloak, an important material for stealth fighters, and the U.S. military invested millions in support of his research. In 2006, Chinese student Liu Ruopeng came to Smith's lab. In the view of an FBI counterintelligence official, Liu had a specific mission — to obtain the secrets. In 2007, Liu took two former colleagues traveling at Chinese government expense

to Smith's lab, and worked on the invisibility cloak for a period of time. To Smith's surprise, the same laboratory was later duplicated in China.[46]

On December 20, 2018, the Department of Justice sued two Chinese citizens from the Chinese hacker organization APT 10, which has close ties with the CCP. According to the indictment, from 2006 to 2018, APT 10 carried out extensive hacking attacks, stealing massive amounts of information from more than forty-five organizations, including NASA and the Department of Energy. The information stolen involves medicines, biotechnology, finance, manufacturing, petroleum, and natural gas. The then-FBI Director Christopher Wray remarked: "China's goal, simply put, is to replace the U.S. as the world's leading superpower, and they're using illegal methods to get there. They're using an expanding set of non-traditional and illegal methods." [47]

China's theft of technology and patents is hard to combat and prevent. Kathleen Puckett, a former U.S. counterintelligence officer in San Francisco, said that China puts all its efforts into espionage and gets everything for free.[48] China moralized, rationalized, normalized, and militarized its stealing spree. It launched a "war against everyone" to loot advanced technology from the West, using patriotism, racial

sentiments, money, and prestige. Such appalling conduct is unprecedented historically.

Some have defended China's activities by arguing that the theft can't amount to all that much, since by stealing a bit here and there, Chinese firms don't get the full picture of how technology is deployed and scaled. But it's very dangerous to look at Chinese industrial espionage this way. Espionage in the electronic age is completely different from that in decades past, in which spies would take a few photos. China steals entire databases of technologies, and in many cases, scoops up not only the technology, but also the experts. With the power of the world factory that China has developed for decades and the R&D potential it has accumulated, the regime is truly able and willing to build a manufacturing superpower based on theft — and it is on course to do so.

From Chapter Eighteen
The Chinese Communist Party's Global Ambitions