

China's Access to Foreign Al Technology

An Assessment

by William C. Hannas and Huey-meei Chang September 2019

Executive Summary

China's technology transfer programs are broad, deeply rooted, and calculated to support the country's development of artificial intelligence. These practices have been in use for decades and provide China early insight and access to foreign technical innovations.

While cyber theft and industrial espionage may or may not be employed, we judge that the main practices enabling Al-related transfers are not illegal. This inspires optimism on one level, but many—possibly most— of these transfers are unmonitored and unknown outside China.

China's reputation as a copycat is overstated and the formulation itself is simplistic. China is building indigenous S&T capacity and can innovate on its own terms, while taking account of global trends to move to new stages of novel development.

Just as important, creativity is multi-faceted and implemented by different cultures in different ways. The belief that liberal democracies, and the United States especially, are endowed with a creative advantage is not well supported by evidence.

We have low confidence that any combination of persuasion or disincentives will cause China to abandon its idiosyncratic transfer practices. Its current reliance on external models to supplement indigenous research is effective, and the alternative (liberalization) is too risky for China. China's legal and extralegal technology transfers are likely to continue. The U.S. government should invest in ways to manage the situation that are consistent with our values and legitimate security concerns.

We propose five policy options to calibrate the problem and address a few of the United States' own liabilities that magnify the problem's effects. They are:

- Expand U.S. government (USG) data collection and analysis;
- Define general standards for evaluating transfers;
- Educate the world on U.S. concerns and expectations;
- Promote immigration of AI skilled persons;
- Expand America's S&T base.

To read the full report, visit: https://tinyurl.com/CSETtechnologytransfer