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The Silicon Valley Perspectives on the U.S.-China Technology Dispute

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How is Silicon Valley, the area in the West Coast of the U.S. where tech companies are concentrated, related and reacting to the U.S.-China dispute over advanced technologies? In this working paper, the author considers the unique characteristics of Silicon Valley and the relations between companies based in the area and Washington.

1. Unique characteristics of Silicon Valley

Topics about advanced technologies in the U.S. and China tend to pay attention to politics in Washington and to the semiconductor industry. In this essay, however, the author would like to focus on Silicon Valley where a diverse range of applications and platforms dominating the world are produced with data that are as powerful as, or more powerful than, hardware. The tech companies based in Silicon Valley have unique values and culture; they undertake actions based on their own unique logics that are independent from politics in Washington.

The area known as Silicon Valley, which is well-known in Japan, extends from San Francisco in northern California to San Jose. In this narrow area are tech companies with the world's largest market capitalization, such as Google, Apple, Facebook, Twitter and Uber based. This region used to be a rural area with many fruit farms until a half-century ago. After World War II, however, the military industry grew in this area, and military technologies were transferred to and utilized by private-sector companies. With Stanford University, the prestigious university on the West Coast, as its focal point, the area has been transformed into a place where entrepreneurs and investors are concentrated. Despite a number of changes, it has experienced, including the decline of the semiconductor industry and the collapse of the dotcom bubble,



Silicon Valley continues to see many world-renowned tech companies and start-ups of different sizes emerge and grow thanks to the area's unique cycle involving entrepreneurs, research institutes and investors.

Cities in the U.S. differs significantly in their characteristics. A key factor that helps understand their characteristics is the area's ethnic makeup. In Silicon Valley, an area with a population of approx. 3.1 million, White, Asian and Hispanic ethnic groups account for, respectively, 33%, 35% and 25%. It is one of the few places in the U.S. where Asians outnumber Whites.¹ Given the ethnical makeup of the U.S. as whole where White, Asian and Hispanic ethnic groups account for, respectively, 76.3%, 5.9% and 18.5%², Silicon Valley is characterized with a large Asian population and a small White population.

This characteristic is even more pronounced at major tech companies. According to Google's report published in 2020, Whites and Asians account for, respectively, 51.7% and 41.9% of the company's employees³. At Facebook, Asians account for 44.4%, the highest percentage among the ethical groups while White comprise 41%⁴. These trends are rarely seen at other major American companies. Furthermore, approx. 40% of the population of Silicon Valley were born outside the U.S. (The largest percentage, 18%, of the population was born in China, followed by 16% in Mexico and 13% in India.)⁵ People at the ages of 39 or below account for approx. a half of the total population of the area, indicating the influx of young labor from Asia and other regions of the world. The concentration of diverse talent is a factor contributing to Silicon Valley's strength to expand globally.

Historically, this region is politically liberal. San Francisco and its surrounding area have been the center for anti-war and civil movements as well as for hippy culture and counterculture including the civil rights movement, Vietnam War protests, and the Summer of Love in the 1950s and 60s. It is one of the first cities in the U.S. that indicated acceptance of homosexuals.

These culture and values also influenced the pioneers of the internet. Also, many people have envisioned a world where power concentrated to the state is redistributed to individuals through the internet that creates a cross-border distribution of information.⁶ For example, Electronic Frontier Foundation, which, founded in 1990, has been involved in many litigations concerning rights on the internet, issued a Declaration of Independence of Cyberspace⁷, proclaiming that the cyberspace is independent from any interference by the state. The tradition of critical attitude against the state authority and

¹ Silicon Valley Indicators 2021 <https://siliconvalleyindicators.org/images/snapshot-ethnic-comp.png>

² US Census Bureau 2019 <https://www.census.gov/quickfacts/fact/table/US/PST045219>

³ Google Diversity Annual Report 2020

<https://kstatic.googleusercontent.com/files/25badfc6b6d1b33f3b87372ff7545d79261520d821e6ee9a82c4ab2de42a01216be2156bc5a60ae3337ffe7176d90b8b2b3000891ac6e516a650ecef0e3f866>

⁴ Facebook Diversity Report 2020 <https://diversity.fb.com/read-report/>

⁵ <https://siliconvalleyindicators.org/images/snapshot-foreign-born.png>

⁶ Brewster Kahle, the founder of the Internet Archive, is critical of the current dominance of tech companies on the internet and is, together with Bernard Lee, the creator of the World Wide Web (www), seeking to re-build a decentralized system that the internet in its early days aimed to create.

<https://www.asahi.com/articles/ASN2L7S4DN2FULFA00D.html>

⁷ Electronic Frontier Foundation <https://www.eff.org/cyberspace-independence>



the centralized power structure, an attitude which can be described as progressive or even anarchical, has been in Silicon Valley for generations. This attitude is also shared among the employees of the tech companies in the area across the generations.

The ethnical diversity including the large Asian population as well as the social and political values shared in this area have contributed to the creation of dynamism differing from that in Washington and other regions in the U.S.

2. Distance from Washington

What, then, has been Silicon Valley's relationship with Washington, the political center? In the early days of Silicon Valley when no major tech company emerged, the tech companies were apathetic to Washington, and vice versa.

A director of a startup once said, "Washington lives in the past and Silicon Valley lives in the future. Their paths do not cross." Silicon Valley's has kept the attitude of keeping a distance from Washington's political world based on old tradition and norms and has refrained from interfering in regulations and politics, with a belief that politics will follow Silicon Valley that disseminates new technologies.

In 2019, Bill Gates, then CEO of Microsoft,⁸ said in an interview, "In the early days of Microsoft, I prided myself on having no office in Washington. Later, I regretted what I said because it must have sounded insulting to Washington."⁹ Such attitude, however, represented not only the culture of Microsoft but that of Silicon Valley.

The circumstances started changing in the 1990s when Microsoft began to emerge.

The U.S. Department of Justice sued Microsoft for violation of the antitrust law for using its monopolistic position to exclude other companies' browsers, putting Microsoft on the verge of divestiture. However, it reached a settlement agreement with the Department of Justice in 2002, with the lawsuit having finally ended in 2011.

This lawsuit, which lasted over 10 years, however, is said to have influenced other tech companies to no small extent. Many companies realized that it is not necessarily advisable to be apathetic to and ignore Washington, which has caused them to deepen their involvement in politics and increase their lobbying cost.

Before the above-said lawsuit was filed, Microsoft used to spend approx. 4 million dollars (approx. 400 million yen) per year for lobbying activities.¹⁰ By 2020, however, its lobbying cost increased to 9.5 million dollars (approx. 950 million yen).¹¹

Since the occurrence of the litigation involving Microsoft, many tech companies

⁸ Microsoft's headquarters is located in Redmond, Washington, north of California, which is geographically outside of Silicon Valley. Amazon is also headquartered near Microsoft in Seattle, Washington. However, these two companies are the U.S.' leading tech companies with values and culture close to those of Silicon Valley. Therefore, they are treated as Silicon Valley companies here

⁹ <https://edition.cnn.com/2019/06/24/tech/bill-gates-big-tech-regulation/index.html>

¹⁰ Research by Center for Responsive Politics, which investigates and publishes on political finance.

<https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=1998&id=D000000115>

¹¹ <https://www.opensecrets.org/federal-lobbying/clients/summary?cycle=2020&id=D000000115>



increased their spending for lobbying in Washington year after year.¹² Though the spending slightly declined around 2009 due to the bankruptcy of Lehman Brothers, it increased again with the advent of the Trump administration in 2017. The tech companies have dispatched many lobbyists to Washington.

Their purposes were, however, mainly to lobby on rather the U.S.' domestic policy issues such as antitrust, neutrality of the internet, immigration, privacy, security, and neutrality of contents. They did not pay much attention to China.

3. The Trump Administration and China

The advent of the Trump Administration in 2017 put many Silicon Valley companies in a delicate position. Most of the leaders of the tech companies were Democrats and particularly clear in their support for Hillary Clinton. Many of the young employees of the tech companies supported Bernie Sanders, who had run against Clinton for the nomination. Sanders, a progressive and “democratic socialist,” were popular among young college graduates, and this trend was even stronger in Silicon Valley. Among the employers of individuals who made a donation to Sanders, the largest donors were employees of Alphabet (Google), with Microsoft, Apple, Amazon and IBM also among the top donors’ employers.¹³

What became clear as soon as the Trump Administration came into power was that Silicon Valley had few channels to communicate with President Donald Trump. President Trump frequently criticized Silicon Valley’s tech companies during his campaign.

Furthermore, Silicon Valley was strongly criticized by the Democrats for letting inaccurate information disseminate and even causing data breaches affecting Americans, which in turn allowed the birth of the Trump Administration. The Republicans held deep-rooted criticism that Silicon Valley’s top executives and employees were all sympathetic to the Democratic Party, and that the information disseminated in Silicon Valley was also in favor of Democrats. In other words, Silicon Valley was being slammed from both the right and the left in Washington.

Mark Zuckerberg, CEO of Facebook, faced criticism for his influence. He emphasized the neutrality of his company by arguing that they are “not the media” and that they are “neutral” because the news being displayed are automatically selected by an algorithm without human editorial intervention.”¹⁴

Looking back on the four years of the Trump Administration, it seems that the tech companies were generally able to get by without causing waves, avoiding being the target of President Trump’s whimsical criticism and occasionally showing cooperative attitudes. In response to the president’s “America First” policy aiming to create jobs, Amazon, Apple and other companies dodged criticism by moving production to

¹² <https://www.opensecrets.org/federal-lobbying/industries/summary?cycle=a&id=B12>

¹³ <https://www.opensecrets.org/pres16/contributors?id=N00000528&cycle=2016&type=f&src=c>

¹⁴ Later, Zuckerberg’s claims were weakened in the face of growing criticism that he was letting fake news go unchecked. More recently, the focus of contention has shift to the degree of checks and curation required of a platform under Article 230 of the Communications Decency Act



domestic locations and emphasizing job creation. Upholding his “America First” policy, President Trump had to externally protect Silicon Valley companies that drive the U.S. economy. On the other hand, for he had repeatedly said that jobs are being lost for competition from overseas, Silicon Valley, which attracted foreign talent from all over the world, was a symbolic place where Americans were losing their jobs.

There was an irreconcilable difference in approaches to immigrants between President Trump and Silicon Valley companies. Acquiring capable talent from throughout the world drives tech companies’ growth. One of the reasons why Silicon Valley continues to see world-class companies emerge from the area is that, as mentioned above, the diverse talent from all over the world develop products with global market expansion in mind from the very beginning.

This is why whenever the Trump Administration imposed restrictions on immigration from countries with large Muslim population and on the issuance of visas, the tech companies, which rarely work in alignment with each other, together repeatedly criticized the Trump Administration.¹⁵¹⁶ Besides criticisms from a humanitarian standpoint, such as the protection of refugees, these companies were faced with a practical issue of getting their talent acquisition interrupted. In fact, there was a serious problem where employees could not return to the U.S. after they visited their home countries. The immigration policy continues to be a local social issue in Silicon Valley where many diverse immigrants reside and work. In and around Silicon Valley, efforts have been made to protect illegal immigrants from the federal government’s prosecution under the Trump Administration. This has been an important social issue for the tech companies based in the area.

4. China’s National Intelligence Law and the Changing Face of Silicon Valley

The relationship between Silicon Valley and China was in a state of exploration for some time after Xi Jinping took office as President.

In 2015, on his first visit to the U.S. after his inauguration, President Xi visited the headquarters of Microsoft, where he was greeted in a welcoming atmosphere including by Chinese employees lined up and holding up a banner. In Seattle, the leaders of some 30 major tech companies including Microsoft, Apple, Amazon, Facebook and IBM gathered in one place to greet President Xi. It was a spectacular sight attracting significant attention; all these leaders rarely gather in one place even in the U.S.¹⁷

Even Silicon Valley, which is usually critical of China’s human rights issues and surveillance activities, could not ignore China’s market size.

¹⁵ <https://www.bloomberg.com/news/articles/2017-01-28/google-facebook-reflect-tech-dismay-on-trump-immigration-order>

¹⁶ <https://www.cnbc.com/2020/06/23/google-amazon-tesla-trump-immigration.html>

¹⁷ Asahi Shimbun, September 25, 2015, morning edition



Apple has been one of the Silicon Valley companies that has relied heavily on the Chinese market. Apple increased the sales of iPhone as China's wealthy population expanded. In 2015, Apple's revenue from China and Hong Kong accounted for approx. 25% of its total revenue. Its revenue from the Chinese market significantly influenced its performance.

Perhaps partly because of these circumstances, Apple removed a VPN app from its app store in 2017 that the Chinese government considered problematic, and in 2018 transferred its cloud service dealing with data from China to a local company in China in accordance with a law that requires data collected in China to be stored in China. Though Apple argued that it was simply following the domestic laws of its business partners, the company drew considerable criticism. Apple, which had once refused to hand over information to the U.S. authorities in a terrorism investigation, was seen as readily complying with the Chinese government's demand.¹⁸

Google launched a project to develop a search engine, accepting the Chinese government's censorship, but the project failed due to loud criticism from both inside and outside the company.¹⁹ Facebook's CEO Zuckerberg speaks Chinese and has been aggressively approaching the Chinese Market. It is said that the company once planned to develop a Chinese version of Facebook, but again, the company has yet to enter the market. Nevertheless, though app is not made available in China, Facebook says it is generating a good amount of profit from the Chinese market by placing ads for Chinese advertisers.²⁰

One of the events that caused the tech companies attitudes to shift gradually away from China was the enactment of China's National Intelligence Law in 2017. The law requires Chinese companies and individuals to cooperate with the Chinese government intelligence activities, and, consequently, any Chinese person could be deemed to be a potential spy.

Zuckerberg, CEO of Facebook, demonstrated his enthusiasm toward China including by frequently visiting the country to give speeches, began to criticize the Chinese government's censorship and political system without freedom of speech guaranteed.²¹

However, in a company characterized with a unique internal environment with many Asian employees, especially from China, these words and actions of the leaders create tension between them and the employees from China.²² Though Facebook has

¹⁸ <https://digital.asahi.com/articles/ASL1J5TSWL1JUHBI01G.html>

¹⁹ According to a former employee of Google who had been involved in this project, "Dragonfly," but left the company because of his doubt about the possible censorship, the internal criticism of the project was particularly significant. This was the first incident in which employees questioned and criticized the management including for the military use of AI and left the company due to differences in philosophy.

²⁰ https://www.annualreports.com/HostedData/AnnualReports/PDF/NASDAQ_FB_2019.pdf

²¹ <https://www.theverge.com/2019/10/17/20919464/mark-zuckerberg-facebook-china-free-speech-georgetown-tiktok-bytedance>

²² <https://www.bizjournals.com/sanjose/news/2019/11/20/reportzuckerberg-s-criticisms-of-china-divides.html>



always prided itself on transparency and openness, given the increase in the percentage of Asian employees, especially from China, there is a risk that the top executive's attitude toward China could cause an issue for the company.

China's National Intelligence Law and other laws may necessitate Silicon Valley companies' separating internally Chinese employees in terms of personnel treatment, and may make it difficult for Chinese nationals to hold key positions in advanced technology fields such as AI and semiconductors.²³

In Silicon Valley, many people change jobs frequently within two to three years. The competition for talent is fierce in the small region, and many engineers move from one tech-company to another. Chinese engineers who become uncomfortable at American companies could change job and join a Chinese company right next door. In the past, many engineers after accumulating experiences returned to China, as "sea turtles" return to their home, and were treated well. In the past few years, however, Chinese tech companies such as Alibaba and Baidu have set up their research and development bases in Silicon Valley. Engineers who graduated from prestigious U.S. universities and work for Silicon Valley companies such as Google and Facebook are beginning to move to these Chinese companies in the region instead of returning to their home country.²⁴

5. The Tik-Tok and Zoom issue

The impacts of China's National Intelligence Law have been immeasurable. The largest concern is that personal information and other data might be obtained by the Chinese government through Chinese companies. To what extent is this a realistic possibility? Let me consider the relatively recent issues concerning the video service Tik-Tok and the video conferencing service Zoom Video Communications (Zoom).

Tik-Tok is an app launched by ByteDance headquartered in China that became very popular in China and became available in the U.S. in August 2018. In only about two months, it exceeded Facebook, Instagram and YouTube in terms of downloads, and has grown rapidly to attain a total of over two billion installs worldwide to date.

Tik-Tok uses a different app in China, and says it stores data of American users in its servers located in Singapore and the U.S.²⁵ However, from the outset, many concerns have been expressed in the U.S., especially in Congress, about China's censorship and possible information leakage. Then President Trump at one point referred to a possible executive order banning the use of the app, indicating his stance of refusing to allow the business to be sold to an American company. In the end, however, he changed his stance and allowed the sale of the business.

Shortly thereafter, however, President Trump issued an executive order banning Tik-Tok's parent company, ByteDance, and Tencent, the operator of WeChat, a Chinese messaging app, from conducting business in the U.S.²⁶

Microsoft, Walmart, Twitter, Oracle, and other companies began negotiating

²³ <https://www.ft.com/content/e5a92892-1b77-11ea-9186-7348c2f183af>

²⁴ <https://www.wsj.com/articles/china-mines-silicon-valley-for-chinese-tech-talent-1530028118>

²⁵ <https://www.bloomberg.co.jp/news/articles/2020-07-15/QDHCONDWX2PS01>

²⁶ Later the federal district court enjoined this executive order.



acquisition of WeChat. In September 2020, an agreement was reached to set up a new company with Oracle as its key partner providing the cloud service, thereby dispelling concerns in the U.S. about information leakage. Then, however, discrepancies arose over management and other issues between Oracle and ByteDance. Without the approval process by the U.S. authorities proceeding, the matter was handed over to the Biden Administration.

On January 6, 2021, just prior to the transition to the new administration, President Trump issued an executive order to place restrictions on the use by U.S. citizens of eight China-based apps including Alipay, Alibaba's payment app.

Though the series of his actions were all largely political in nature, with President Trump demonstrating his hardline stance against China at home and abroad, a point raised in his argument for excluding Chinese apps was that information of American citizens will be transferred to the Chinese government and that there is a national security risk involved. How likely is it that these apps are extracting the data as the Trump administration argued they are?

Regarding Tik-Tok, an investigation by several experts "found no activity that would have resulted in the acquisition of personally identifiable information."²⁷ On the other hand, it was found that it had acquired information that could be linked to the smartphone owners. There found a program that was intended to extract the data though there was no evidence that it had been used.²⁸ Though it is possible that President Trump was trying to exaggerate the risk, it seems the suspicion has not been completely dispelled since the program can be updated and rewritten.

Another issue was over Zoom, which has been rapidly disseminated in Japan, too, since the COVID-19 pandemic.

On June 4, 2020, many Zoom-based online gatherings mourning the Tiananmen Square incident were shut off allegedly due to pressure from the Chinese government. On December 16, 2020, the U.S. Department of Justice announced that it had criminally prosecuted a Zoom employee residing in China.²⁹ Zoom responded by saying that this employee had given personal information to the Chinese government and shut off the rallies.³⁰

Zoom admitted that there was pressure from the Chinese government as they "were notified by the government that the online meetings to commemorate the Tiananmen Square incident of June 4 are illegal in China"³¹ and that they shut off the gatherings with Chinese people in them. Zoom also said they had not passed the information of users outside of China or the contents of the meetings to the Chinese

²⁷ https://www.asahi.com/articles/ASP1B6H8GNDXUTIL04G.html?ref=pc_rellink_01

²⁸ Same above.

²⁹ <https://www.justice.gov/opa/pr/china-based-executive-us-telecommunications-company-charged-disrupting-video-meetings> This announcement by DOJ did not disclose the name of the person's employer, but, in response to the announcement, Zoom made an official comment admitting that the person was its employee.

³⁰ <https://blog.zoom.us/our-perspective-on-the-doj-complaint/>

³¹ <https://blog.zoom.us/improving-our-policies-as-we-continue-to-enable-global-collaboration/>



government and that there was no “backdoor” to look into the meetings from the outside.

Zoom, on the other hand, admitted that they had passed some of the data of users in China to the authorities. Thus, the company has taken two separate approaches to users inside and outside China. The company said that they would “ensure that users outside China are not affected by the Chinese government’s demands.” It also said, “although the data of users outside of China were set to go through their servers in China, there was no evidence that the data had been extracted.”³²

The U.S. federal government and some U.S. companies have banned the use of Zoom because of the possible information breach and data acquisition by the Chinese government. Though, in response to the above-described incident, Zoom explained it had not pass on the information of users outside of China or the contents of the meetings, it has remained unclear whether Zoom employees could listen to the meetings.

There also occurred an incident where non-Chinese accounts were deleted at a meeting in which Chinese and non-Chinese participants were present. The company said it would in the future take measures such as suspending an account based on the location information of the user. However, there remain many problems to be solved, such as what it will do when it receives similar requests from other countries, and how the will determine whether it can intervene in a meeting depending on its contents.

Another problem that surfaced in this process is that it is difficult to distinguish a case where an individual in his/her personal capacity cooperates with the Chinese government based on the National Intelligence Law without the company’s knowledge from a case where a company gets its employees to censor the information in response to the Chinese government’s request for cooperation. In the case of the above-said incident, Zoom sought to put an end to the issue by dismissing the employee, claiming that the employee, who was a spy of the Chinese government, acted in his sole discretion and that the company had not cooperated with the authorities.³³ The National Intelligence Law stipulates that both individuals and companies are obliged to cooperate in intelligence activities. The situations get complicated when a company disciplines employees for cooperating with the government in intelligence activities while it admits the existence of the government’s censorship and pressure.

It is difficult to accept the company’s explanation at face value partly because of a similar incident that had occurred in the U.S. in the past—the case of the revelations made by former CIA employee Edward Snowden in 2013, which stunned the world.

The classified material brought out by Snowden revealed that the U.S. government had also been collecting large amounts of data on users in the U.S. and abroad with the help of tech companies, mainly in Silicon Valley. Though some of the data extraction was done without the knowledge of the tech companies and telecommunication providers, what the revelations revealed was a huge stain on the minds of Silicon Valley companies. It was after this incident that Apple, Google and

³² Same above

³³ <https://blog.zoom.us/our-perspective-on-the-doj-complaint/>



other companies began to make privacy and security a full priority.

What the Snowden incident has revealed is that even when the government secretly collects personal information through tech companies and telecommunication providers, it is very difficult to know and impossible to verify it from the outside. It was after the Snowden incident when Beijing began moving towards establishment of China's National Intelligence Law.³⁴ The Snowden incident appears to have significantly affected not only the U.S. but also China developing its own information monitoring system.

6. The key was past cyberattacks

What, then, could happen if, as President Trump feared, the data really get to the Chinese government? The key to considering this is the several cyberattacks that had occurred prior to the above-mentioned incidents.

In 2015, the systems of the U.S. Federal Office of Personnel Management (OPM) were cyber-attacked, and that resulted in the theft of data on over 22 million individuals including federal government employees, their family members and friends, and the government's contractors. The stolen data included employee performance evaluations and data of employees in departments that require security clearance. Considered to be the worst hack that had ever occurred in the history of the U.S. federal government, this incident was later determined by the U.S. government to have been committed by the Chinese government.

In 2017, Equifax, a major credit bureau, was hit by a cyberattack, which resulted in the theft of personal information of more than 150 million Americans. In February 2020, the U.S. Department of Justice determined that four members of the Chinese military was responsible for this incident and indicted them.³⁵

In 2018, the booking information system of Marriot, the world's largest hotel group, was hacked, resulting in the theft of a huge amount of customer data of approx. 500 million users. It was found that the hacking had begun four years earlier and that the information had been stolen over many years.³⁶ This incident, too, was later attributed to the Chinese government.

Previously, large-scale cyberattacks with foreign governments behind had often sought to demand money in exchange for stolen data to earn foreign currencies, disrupt social infrastructure, expose information about specific politicians to discredit them, or disrupt the society. On the other hand, China's hacking differs from these previous information breaches in that it targets a large amount of personal information of various kinds, finding value in the data themselves and trying to utilize the data.

Attorney General William Barr in his February 2020 statement attributed the hacking on OPM, Marriot, Equifax and other entities to the Chinese

³⁴ <https://digital.asahi.com/articles/DA3S14945374.html?requesturl=articles%2FDA3S14945374.html&pn=4>

³⁵ <https://www.justice.gov/opa/pr/chinese-military-personnel-charged-computer-fraud-economic-espionage-and-wire-fraud-hacking>

³⁶ <https://www.reuters.com/article/us-marriott-intnl-cyber-china-exclusive/exclusive-clues-in-marriott-hack-implicate-china-sources-idUSKBN1O504D>



government, saying “For years, we have witnessed China’s voracious appetite for the personal data of Americans...” He also said in the same statement, “This data has economic value, and these thefts can feed China’s development of artificial intelligence tools as well as the creation of intelligence targeting packages.”³⁷

In other words, in addition to the seriousness of the theft of individuals’ personal data, the combination of these large amounts of data can be used to reveal personal relations and behavioral patterns of intelligence agency personnel as well as of civilians. Furthermore, China might be able to develop new AI by having their existing AI read the massive amount of personal data on Americans that China had not had access to before. The U.S. Department of Justice seems to be aware of this possibility. Especially, the information breached at OPM includes a large amount of data on national security-related personnel, which is said to have serious implications for the next decade or more.³⁸

If China develops a database based on the large amount of data it obtained from these large-scale cyberattacks, it can utilize any personal information it obtains from apps, even though fragmented, to obtain a significant amount of information by combining it with the data available on the database. In terms of the development of AI, which cannot be started without data, the data has significant “economic value,” as Attorney General Barr put it.

7. Silicon Valley may lose

The Trump Administration’s actions to exclude Chinese companies and China-based apps are not entirely unfounded, although there is not much clear evidence to support the suspicion. Nevertheless, the Trump Administration’s approach is problematic in many ways from a long-term perspective.

The first is that, against the backdrop of the U.S.-China dispute, President Trump, in what appeared to be ad hoc actions, directly intervened in private-sector business transactions with his executive orders, including ordering companies to sell their businesses. His efforts to prohibit provision of services by Chinese companies were not only national security measures but also political decisions, and he appeared to be seeking to increase his domestic support by taking a hardline stance against China. The fact that the president of a country based on a free economy set such a precedent may shake a confidence in the U.S.

Another point is that the U.S. government, which has been emphasizing the importance of a free and open internet space and criticizing China’s censorship and exclusionary policies, shut Chinese companies out of its market and making their services unavailable. This could be a denial of the liberal values that the U.S. has been promoting. There could be also a risk that mutually exclusionary approaches could eventually lead to a division of the internet on a global basis.

For tech companies in Silicon Valley, the fragmentation of the internet, as seen in

³⁷ <https://www.justice.gov/opa/speech/attorney-general-william-p-barr-announces-indictment-four-members-china-s-military>

³⁸ <https://www.wired.com/story/china-equifax-anthem-marriott-opm-hacks-data/>



the case of Zoom, is a far cry from the free flow of information and the revenue model they have built on it.

Instagram head Adam Mosseri said, “The U.S. ban on Tick-Tok is no good for Instagram, Facebook and the internet as a whole.”³⁹ Reiterating his concern, he also said, “any short-term benefit that Instagram would see from a potential TikTok ban is greatly outweighed by the risks of a fragmented internet.”⁴⁰

Eric Schmidt, former CEO of Google and a member of the Pentagon’s advisory board, also insists that the “decoupling” of the U.S. and China in the technology space will “splinters the internet platforms, reduces revenue for our companies, and produces few opportunities for our tech firms to succeed.”⁴¹ The businesses of Google, Instagram and many other Silicon Valley tech companies are built on data travelling around the world. If they accept decoupling with China, they may be requested by European countries to separate their data away to protect their personal information.

Criticism has also been directed at tech companies in Silicon Valley because most tech companies conduct business with China in one way or another, accepting the wishes to the Chinese government to some extent.

For example, in December 2020, an NGO published a research report on Apple that emphasizes individuals’ privacy rights. According to the report, an investigation of the tech giant’s app store revealed that Apple had removed hundreds of apps from its app store for Chinese market following a request from the Chinese government.⁴² Though Apple explained that it had removed only pornographic and gambling apps which were illegal in China,⁴³ an NGO’s research found that these apps accounted for only 5% of all the apps the company had removed and that approx. 3,200 apps had become absent, including those relating to Tibetan Business, Hong Kong’s civil movements, LGBTQ, and other contents that the Chinese government dislikes. The NGO’s report concluded that the results suggest that Apple is blocking sensitive apps for the purpose of maintaining its relationship with the Chinese government.

Jacob Helberg, an adjunct fellow at the Center for Strategic and International Studies and former policy advisor to Google, argued in Foreign Policy that “Silicon Valley can’t be neutral in the U.S.-China Cold War.” In fact, freedom of speech in the U.S. is incompatible with a single-party dictatorship. It is impossible for the companies to maintain good relations with Washington while coping with Beijing’s dictatorship. He urged that the “one company, two systems” approach, as opposed to “one country, two systems,” doesn’t work and that “Time is running short for firms to decide where they stand.”⁴⁴

Silicon Valley actually shares a sense of crisis. Schmidt published an article in New York times on February 27, 2020, titled “Silicon Valley Could Lose to

³⁹ <https://twitter.com/mosseri/status/1306941776733835278?s=20>

⁴⁰ <https://twitter.com/mosseri/status/1306941776733835278?s=20>

⁴¹ <https://www.wired.com/story/crack-down-china-except-silicon-valley/>

⁴² <https://www.techtransparencyproject.org/articles/apple-censoring-its-app-store-china>

⁴³ <https://www.apple.com/legal/transparency/choose-country-region.html>

⁴⁴ <https://foreignpolicy.com/2020/06/22/zoom-china-us-cold-war-unsafe/>



China.”⁴⁵

He wrote, Americans “have put too much faith in the private sector to ensure U.S. global leadership in new technology.” He urged the U.S. government to get involved in the U.S.-China competition in a serious way. He called on the government to provide financial support for advanced technology and technology development, facilitate strong collaboration between the public and private sectors, revise the immigration law to retain foreign students and capable immigrants. He stressed the importance of government support in the cause of protecting freedom and democracy, saying, “We must show that these new technologies can advance individual liberty and strengthen free societies. For the American model to win, the American government must lead.”⁴⁶

All of Schmidt’s arguments are an extension of the policy demands that Google and other tech companies have been making of Washington. He might be using China’s threat to push the government to intervene. Nonetheless, it is a new phenomenon that in Silicon Valley, where the private sector has historically disliked the government interference and always taken pride in being the driving force behind the technology superpower, there are opinions calling for a government-led response to China.

8. Changing lobbying activities

I have already mentioned the lobbying activities of West Coast tech companies in Washington, but what has changed in recent years is that Chinese tech companies have also begun to “enter the fray” here. In addition to Facebook, Amazon, and Alphabet (Google), which have always been the top lobbying spenders in the U.S., ByteDance (Tic Toc’s parent company), Alibaba, Tencent, and others began to appear around 2018.⁴⁷

Until then, Chinese companies were said to rarely lobby the U.S. government directly in Washington for their demands. When Chinese companies wanted to influence U.S. policy, they often lobbied the U.S. government through the Chinese government or U.S. companies doing business in China, and they were not keen on direct lobbying in Washington.⁴⁸

However, The hard-liner policy toward China under the Trump administration has made it impossible for them to remain silent. In the year to spring 2019, the annual lobbying expenditures of eight Chinese telecom companies jumped to \$7.9 million (approx. JPY800 million), nearly eight times of the amount spent the year before, according to one estimate.⁴⁹ Such lobbying companies include the telecom and tech companies that have been banned from doing business with the U.S. or those with the use of their services prohibited in the U.S. under the Trump administration.

Meanwhile, changes are also taking place in the tech industry in the U.S. The previously relatively cohesive lobbying structure of tech companies is beginning to break down.

A symbolic event was the dissolution at the end of 2021 of the Internet Association, a

⁴⁵ <https://www.nytimes.com/2020/02/27/opinion/eric-schmidt-ai-china.html>

⁴⁶ <https://www.nytimes.com/2020/02/27/opinion/eric-schmidt-ai-china.html>

⁴⁷ <https://www.opensecrets.org/news/2021/10/big-tech-facing-congressional-scrutiny-flex-lobbying-power/>

⁴⁸ <https://www.politico.com/story/2018/07/19/chinese-companies-dc-lobbying-trade-war-731619>

⁴⁹ Same as above (Footnote 48)



lobby group that had united many of the major tech companies in the U.S.⁵⁰ This organization had been working to bring together the voices of major tech companies under the slogan “the voice that unites the Internet economy,” but in recent years, an increasing number of companies, including Microsoft and Uber, had left the organization one after another.

In the background is the fact that antitrust law issues, which the organization kept at a distance in the past, are becoming a central issue in tech companies' lobbying, and that the content of tech companies' lobbying activities is becoming more diverse and less “voice-uniting.”⁵¹

In addition, the Internet Association continued to take the position that tech companies are not responsible for the content of their postings under Article 230 of the Communications Decency Act, but towards the end, the member companies were no longer in agreement about the immunity of companies,⁵² which some believe is another reason for the dissolution.

9. National Security Commission on Artificial Intelligence; and China Initiatives

In this context, I would like to introduce two interesting events in the U.S. domestic policy toward China since 2021. One is the final report of the U.S. government's advisory body, the National Security Commission on Artificial Intelligence, which was released in the spring of 2021.⁵³

It is a massive report of nearly 600 pages, chaired by former Google CEO Eric Schmidt, and compiled with former Deputy Secretary of Defense Robert Work. It is a practical discussion of AI and security from all directions, from the organization of government agencies to human resource development, acquisition of talented people, and visa issues for working in the U.S.⁵⁴ Although the contents are comprehensive and enormous, it is very easy to read and is designed in such a way that even non-specialists can easily understand the contents. After the release of the report, the commission members have been holding online forums and enthusiastically disseminating information, showing that they are trying to broaden the scope of these issues, which tend to be limited to a few experts, to the private sector.

What is striking about this report is that while it stresses the importance of protecting advanced technologies in this field, where technological competition between the U.S. and China is at its fiercest, it does not suggest that shutting out talented Chinese personnel from the U.S. is the solution.

The report stresses the importance of how to attract China's talented human resources to the U.S. and create the conditions for them to stay in the U.S., and recommends specific measures. For example, the report cites maintaining a pipeline of students studying at U.S. universities, especially STEM science students, and improving the employment environment in the U.S. to make it easier for graduates of the universities and graduate schools to stay and work in the U.S. instead of returning to China. It also says that the government should back up

⁵⁰ <https://www.politico.com/news/2021/12/14/silicon-valleys-voice-in-washington-to-dissolve-524486>

⁵¹ <https://www.axios.com/internet-association-dissolve-lobby-8f2775b9-cde4-4d31-b118-b186d6df83e7.html>

⁵² Same as above

⁵³ <https://www.nscai.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf>

⁵⁴ <https://www.nscai.gov/commissioners/>



the technological competition in AI as a nation, rather than leaving it solely to the private efforts of tech companies, drawing conclusions similar to those of previous essays written by Schmidt.

Another move in the other direction is the China Initiative, which was launched by the Justice Department in November 2018 under the Trump administration,⁵⁵ aiming to uncover intellectual property theft specifically by China. It specifies that FBI, which is mainly in charge of investigations, targets a wide range of people, from researchers at universities to employees of companies, not only in IT but also in a wide range of fields such as chemistry and engineering.

Soon after the start of the initiative, arrests began to be made at universities across the U.S., and the media began to report stories of prominent Chinese researchers and faculty members being routinely followed, suddenly detained at airports, or raided.

One of the most famous cases was in January 2021, when a prominent professor of Chinese descent at the Massachusetts Institute of Technology (MIT) was arrested by the Justice Department on charges of filing false tax returns and failing to disclose funding from the Chinese government and other sources. In response, the president of MIT denied the charges, saying, "This is an agreement between the universities, not a personal receipt of funds," and expressed his full support for Chinese students and researchers.⁵⁶

Similar revelations have been made at famous universities such as Stanford and Yale, as well as at universities across the U.S. Even at universities where no arrests have been made, researchers have signed an open letter criticizing the China Initiative.⁵⁷ Criticism increased even more when there were a series of cases in which people who were initially accused were later acquitted. In late October 2021, researchers at Stanford University held an online meeting to discuss the issue.⁵⁸

Why has there been so much confusion? One of the problems with the China Initiative is that it is unclear what criteria are used to determine the targets of investigations, and there is no clear indication of what constitutes a target of an investigation.

In January 2020, a Harvard University chemistry professor was indicted for lying about his ties to China,⁵⁹ and in December 2021, he became the first academic researcher to be convicted.⁶⁰ However, there have not been many cases where it has been proven that a person intentionally tried to steal intellectual property, and most often the focus has been on whether or not the person disclosed when receiving a grant from the U.S. government that they were receiving a grant from an institution with ties to the Chinese government. In the case of the MIT professor, for example, he had already received a grant from the Chinese government when he tried to obtain a grant from the U.S. government, but he was not required to disclose

⁵⁵ <https://www.justice.gov/nsd/information-about-department-justice-s-china-initiative-and-compilation-china-related>

<https://techcrunch.com/2021/08/31/us-giants-top-tech-industrys-100m-a-year-lobbying-blitz-in-eu/>

⁵⁶ <https://president.mit.edu/speeches-writing/distressing-news-about-professor-gang-chen>

⁵⁷ <https://drive.google.com/file/d/1LVW-6Bv6iTjrsWKVDhgJftoSRs8FIOTJ/view>

⁵⁸ https://www.youtube.com/watch?v=jIL87bV_iVE&t=527s

⁵⁹ <https://www.justice.gov/opa/pr/harvard-university-professor-and-two-chinese-nationals-charged-three-separate-china-related>

⁶⁰ <https://www.justice.gov/usao-ma/pr/harvard-university-professor-convicted-making-false-statements-and-tax-offenses>



it in the first place.⁶¹

Overall, these investigations seem to have been excessive. A Silicon Valley-based journalist said, "There have been moves to crack down on intellectual property theft by tech companies and others for some time, but the policies of the FBI on the ground and those of DOJ are not always aligned.

When the aforementioned MIT professor was acquitted after about a year and a half of house arrest, the New York Times pointed out that there were no clear rules for disclosing information showing "ties to China. It noted that there were no clear rules on disclosing "ties to China," and cited a former investigator's view that they are trying to find an unrelated target and get easy results.⁶²

The China Initiative was launched by the Trump administration as part of its policy toward China, but as more and more people were accused, there was another criticism: racism. The criticism came from the fact that many who have been accused were Chinese born or Chinese descent, and targets of investigations were thought to be racially profiled. In July 2021, about 90 federal lawmakers signed an open letter stating that it is discriminatory and illegal to target people by race. The MIT Technology Review independently analyzed each of the cases where these accusations were made and pointed out the ambiguity of the evidence.⁶³ Various human rights groups have also started an online petition drive to end the China Initiative, and criticism is mounting,⁶⁴ suggesting that it is only a matter of time before the DOJ pulls back the curtain.⁶⁵

10. Exclusion is not a solution.

There are many who believe that in the long run, such an approach will only benefit China, as talented Chinese personnel will leave the U.S. because they find it too risky to do research in the U.S.

One such person is Professor John Hopcroft of Cornell University in the United States, a respected Turing Prize-winning algorithm researcher who has been involved in university reforms in China, Brazil, Mexico, and other countries around the world. Based on his experience of training many students from China in his laboratory, he said, "The level of top-class Chinese students is very high. They come to the U.S. to study and become researchers at U.S. universities, and that is how these universities are able to maintain their world-class research level." He claims that how we can keep these students and researchers in the U.S. is important, adding, "China will eventually become the world's largest economy, so we have to think strategically about how to maintain our ties with it."⁶⁶

The number of Chinese students studying in the U.S. topped India once again in 2009, the first time since 2001, and has increased every year since then until the COVID-19 spread. They made up 35% of all international students (about 370,000) studying in the U.S. in 2019,

⁶¹ <https://www.technologyreview.com/2022/01/15/1043319/china-initiative-gang-chen-mit/>

⁶² <https://www.nytimes.com/2021/11/28/world/asia/china-university-spies.html>

<https://www.nytimes.com/2022/01/20/science/gang-chen-mit-china-initiative.html>

⁶³ <https://www.technologyreview.com/2021/12/02/1040656/china-initiative-us-justice-department/>

⁶⁴ <https://www.apajustice.org/end-the-china-initiative.html>

⁶⁵ <https://foreignpolicy.com/2022/02/13/china-fbi-initiative-spying-racism/>

⁶⁶ Interview over Zoom, August 18, 2021



making China the largest source of international students in the U.S.⁶⁷ Professor Hopcroft is also concerned that if they stop choosing the U.S. as their destination, not only U.S. universities but also U.S. industries will not be able to maintain their current levels.

In Japan, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) has established a new post to counter the outflow of intellectual property and other technologies since 2021, and asked universities across the country to establish a department in charge of security. It is said that all national universities and more than 60% of public and private universities have accepted this request.⁶⁸

However, the question remains as to how much universities can and should actually check. How many cases can be revealed only by the documents submitted to the university? The relationship between the independence of the university and the investigative body also needs to be properly sorted out and considered.

Some of the researchers who have moved from Japan to China have bitterly commented, “The Japanese government and politicians seem to be wary only of information leaking out of Japan, but there are many areas where the research environment is superior and the standards are higher in China,” and “If the Japanese government wants to retain human resources, it should improve its own research environment first.”⁶⁹

The problem with the China Initiative is that the investigations were sloppy, involving a sudden raid on a house, while the rules for receiving research funds and the standards for disclosure requirements were inconsistent and not well defined. The attrition effect that this had on researchers and students who had nothing to do with the theft of technology was immeasurable.

Many researchers who have been the subject of China Initiative investigations and acquitted are concerned about their future careers in the U.S. and are not sure if they will stay in the U.S. any longer. If Japan follows a similar approach, it may be even more shunned as a study and travel destination.

Japan has maintained one of the world's strictest border restrictions, or "waterfront" measures, for a long time due to the COVID-19 pandemic, which resulted in many foreign students and researchers losing the opportunity to come to Japan. There is a possibility that some of them may never return. A prudent approach is needed to eliminate concerns about technology theft without negatively impacting innocent students, researchers, and business people⁶⁹.

***Reference information**

I heard from a 29-year-old Chinese man working for a major tech company in Silicon Valley

⁶⁷ <https://www.iie.org/Research-and-Insights/publications/International-Students-in-the-United-States>

⁶⁸ <https://www.asahi.com/articles/ASPDC5SVFP8YULZU007.html>

⁶⁹ Same as above

⁶⁹ On February 23, 2022, Assistant Attorney General Matthew Olsen announced that the Justice Department would end the China Initiative.” While I remain focused on the evolving, significant threat that the government of China poses, I have concluded that this initiative is not the right approach. Instead, the current threat landscape demands a broader approach.” Olsen said.

<https://www.justice.gov/opa/speech/assistant-attorney-general-matthew-olsen-delivers-remarks-countering-nation-state-threats>



about the situation there, including the reality of headhunting practices by Chinese companies, and how he plans to work in the future. The following is the story of this man.

Although I have heard that there have been arrests for intellectual property theft, I have never felt that Chinese employees are actually under suspicion or treated as spies within the company. In fact, the company is trying very hard to protect Chinese employees. All tech companies seem to be treating them very well, holding internal meetings to hear the concerns of their employees. Still, I think the reason why some Chinese people in Silicon Valley go back to China is just because the conditions and offers are good. My wife (who is also Chinese) works for another major tech company here, and if we were to decide to change jobs, I think the first thing we would take into account is the amount of compensation. The young people in China, who have suppressed COVID-19, feel that the U.S. is more dangerous. Also with the news of hate crimes, etc. in the U.S., it seems that young Chinese people are beginning to hesitate about going to the U.S.

• Realities of headhunting by Chinese companies

Although those headhunted by tech companies in China are offered about 70% of the salary of U.S. companies, the cost of living and housing is much cheaper in China, so if you live in China, you will have almost the same standard of living. In the past three to four years, many unicorns have been born in China, and many offers began pouring in from Chinese tech companies. However, the problem is "996." Chinese tech companies often require their employees to work from 9 a.m. to 9 p.m., 6 days a week ("996"). For those who have been working in the U.S., this is tough. One of my Chinese friends was headhunted by Ticktock and went back to China, but came back to the U.S. in less than a month. Recently, some people have moved to the U.S. subsidiaries of Ticktock, Tencent, and other companies that have expanded into Silicon Valley (such as their offices and research centers in Silicon Valley). Since they are Chinese companies, they are not likely to be discriminated against, which is a relief, and they have the advantage of being able to maintain the American standard of living. However, the headquarters treat these offices and research centers as overseas branches. This, as opposed to working at the headquarters in China, gives an impression that you will be at a disadvantage when it comes to promotion. So, it is true that people are hesitant to move to the U.S. if you are looking for a career.

• People are going back to China: Is it due to China's one-child policy?

In Silicon Valley, there are two different generations of people of Chinese descent who have decided to live there permanently: (1) those currently in their 50s or older who have experienced poverty in China and want to stay in the U.S.; and (2) those who are currently between 45 and 50 years old, experienced the Tiananmen Square protests when they were younger, and came to the U.S. hoping to find hope there after despairing over the democratization of China. In contrast, many of them in my generation (in their late 20s to 30s) go to college in the U.S., make a career working for major tech companies, then return to China at some point. The primary reason is the one child policy.

Like myself, many of them in this generation grew up as an only child and are married to



a spouse who also grew up as an only child, with both parents living in China. In China, it is basically children who take care of their parents. Couples without siblings are forced to return home when their parents get old, and the reality of why this generation does not or cannot stay in the U.S. is that they have to take care of their parents. There is also the story of the "sea turtles," and when people move to Chinese companies, it is seen as if they were headhunted by the Chinese government. But as far as I know, many of the transitions are due to family or financial reasons. I too often think about what I will do when my parents get older, but as far as factors other than family are concerned, I think I will decide where to work based on the amount of compensation.

At the same time, when I talk to people of my generation overseas, many of them are afraid that something like the Cultural Revolution may happen in China in the future. There is a concern about how returnees from abroad will be treated in China when that happens.