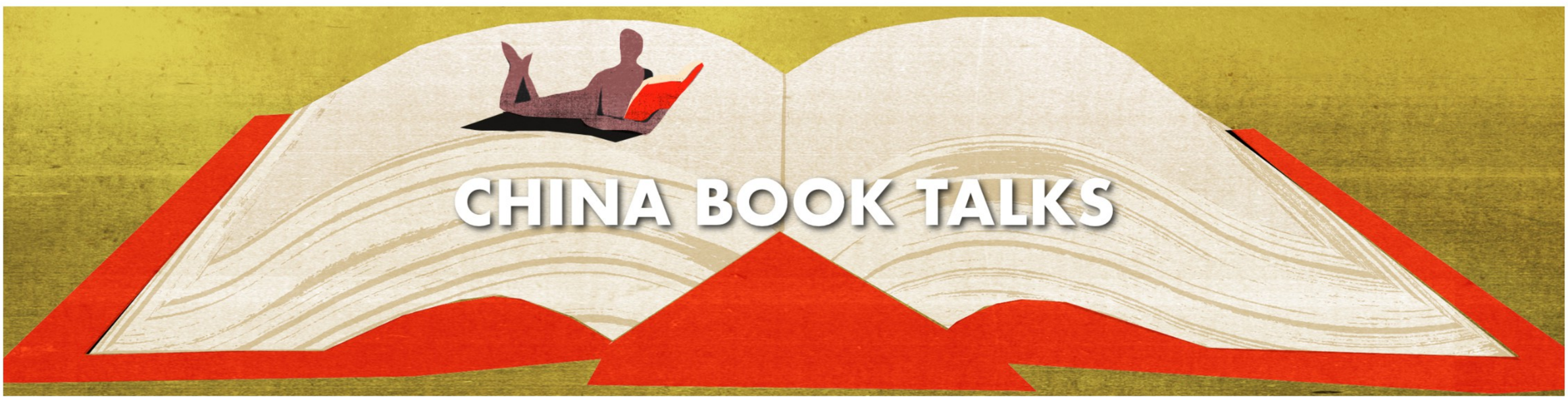


BOOK TALK

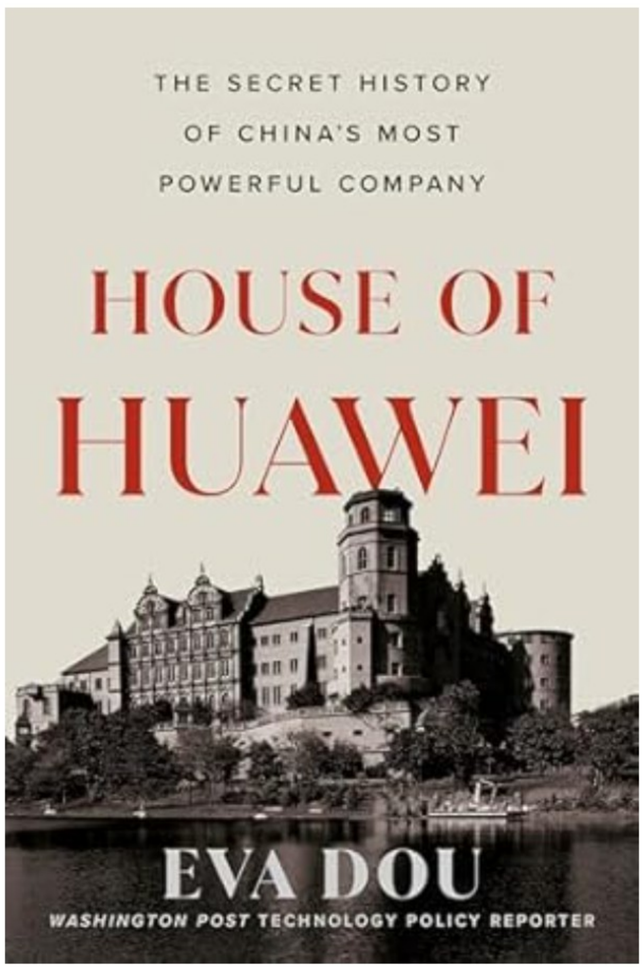
Eva Dou on Huawei and Chinese Tech

Eva Dou discusses her new history of Huawei, the Chinese telecommunications giant at the center of the U.S.-China tech wars, and the future of Chinese technology in Trump's America.

EDITORS — JANUARY 28, 2025

TECHNOLOGY

The Chinese telecommunications giant Huawei grew from humble origins. Founded in 1987 by a former People's Liberation Army (PLA) officer, Ren Zhengfei, it is now one of the largest companies in the world. In 2018, Ren's daughter Meng Wanzhou was detained in Canada under indictment of bank fraud. And in 2019, Huawei was added to the U.S. Entity List, amid suspicion it could provide a backdoor into American telecom networks for the Chinese Communist Party. That was just one salvo in a wider war of words (and action) between the U.S. and China during the first Trump administration, that has since continued in different forms and with fresh targets.



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Last week, at Asia Society in New York, we hosted Eva Dou, a technology policy reporter at *The Washington Post*, to discuss her new book *House of Huawei: The Secret History of China's Most Powerful Company* (Portfolio, 2025), previously excerpted here. Told as a chronological narrative starting from the birth of Ren Zhengfei in the 1940s, the book tracks Huawei's trajectory through political upheaval, economic boom and diplomatic crisis. Dou details the management practices that made Huawei a corporate juggernaut, while exploring the state support that is both a source of the company's power and a reason it is viewed with distrust abroad. In conversation with Dan Wang, a Fellow at the Yale Law School's Paul Tsai China

Center, she talked about Huawei's past and future, as well as the potential TikTok ban, Chinese rivals to Nvidia, and the Shenzhen tech ecosystem:

> Ren Zhengfei, in his early days, had a saying that, 'A country without its own program-controlled switches is like one without an army.'
>
> — *Eva Dou*

Guests

Eva Dou writes about technology policy for *The Washington Post*. She was previously a foreign correspondent for *The Wall Street Journal* in Beijing from 2015-20, and Taipei until 2022. Much of her work focuses on the intersection of technology and geopolitics. Dou is the author of *House of Huawei* (2025). She lives in Washington, D.C.

Dan Wang is Fellow at the Yale Law School's Paul Tsai China Center and technology analyst at Gavekal Dragonomics. His research focuses on China's technology capabilities, as part of the East Asian industrialization story. He has contributed to several magazines, and writes a popular annual letter at his website. He was born in Toronto, lived in Hong Kong, Beijing and Shanghai, and is currently based in New Haven.

Transcript

Dan Wang: Eva, thank you for being here and thank you for writing a tremendous work. I first got to know Eva about seven years ago when we were both in Beijing and Eva was a foreign correspondent for the *Wall Street Journal*. One of the things I was really impressed by with Eva was that she was always really good at doing intensive research for everything that she covered, in addition to being an excellent reporter. And I think when you pick up *House of Huawei* you'll see all of these instincts rolled up very well, in terms of having a tremendous reporterly eye on what's going on with Huawei, having interviewed Ren Zhengfei, as well as a lot of other people, former Huawei employees, as well as present employees, combined with intensive archival research about what was going on in terms of Ren Zhengfei's early life, what his father was like, the early days of Huawei's incorporation as a company. And I think what you'll pick up is a sense of the freewheeling times of China's early foray into capitalism when Huawei was first incorporated in Shenzhen.

And so I think this is a terrific book and I think this is going to be a revelatory work about what is going on with China's most important company. And with that, Eva, I think I want to invite you to introduce a little bit of the company. You'll read a very short excerpt of a few paragraphs inside the introduction, which I think will help set the stage of what Huawei is and give a sense of how important this technology company is.

Eva Dou: Thank you so much for the warm welcome to Alec and Dan. So pleased to be here with all of you. Thanks for braving the cold to come out today. So Huawei Technologies, it is the largest company in the world for making the pipes that make up phone and internet networks. That's sort of the most important line of business that they do. They have quite a few other lines of business also, smartphones — they're one of the world's major smartphone brands, which is how most consumers have heard of the name. They also make AI chips, which has been a growing area of importance for them in China's tech ecosystem. I'll start by just reading a small snippet from the introduction:

> Ren Zhengfei said he was only a maker of pipes–a humble vocation not unlike that of a plumber. Not everyone saw things this way. Sure, Huawei might make pipes of a sort, but it was not water flowing through them. What flowed through these pipes was telephone calls, emails, internet traffic, text messages, video calls, corporate accounting, medical records, wills and testaments, love letters, family photographs, police intelligence, government secrets. In a word: data. The most valuable commodity of the information age. And Huawei was the largest supplier of these pipes–by a long shot.
>
> And there was something else here. The question of Huawei wasn't merely a question of business. It was also a question of belief. When the Soviets had sent Sputnik 1 into the skies in 1957, it had shaken Americans to the core. There was nationwide soul-searching. How could Moscow have gained the technological edge with its stodgy communist methods? The collapse of the Soviet Union seemed to put that debate to rest, affirming the brittleness of Communist rule and the superiority of Western liberal democracy. As for China, it had been a technological leader centuries ago, inventing the compass, gunpowder, and paper. But it had fallen behind in the fifteenth century, and the prospect that it would ever catch up again seemed unlikely. Until now. The world was having another Sputnik moment. And this time the Sputnik was Huawei.
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> Huawei was filing more patent applications than any other company on earth. Huawei was number one in 5G. Huawei was number one in smartphones. It was breaking ground in artificial intelligence. It pulled in more in annual sales than Disney and Nike combined, and it employed more people than Apple. The rise of such an absolute corporate juggernaut was not supposed to be possible through Communism. But it had happened.
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> It was the kind of thing that made people reconsider what they knew to be true. They were reconsidering if free trade really made everyone wealthier. They were reconsidering if history did end with Western-style democracy. They were reconsidering if the source of innovation really was college dropouts' garages and not the state picking winners and losers. Because if so, then how did a company like Huawei exist?

Dan Wang: Eva, my first question to you will be: How does a company like Huawei exist? There are several competing narratives about Huawei that I think you do a really good job of teasing apart. There is, on the one hand, a narrative that is mostly from the American government that Huawei is where it is through tremendous help from the Chinese government. Now that is established. There is a lot of export financing that China has

given to Huawei. There have been high level political visits. Jiang Zemin, Hu Jintao, Xi Jinping, have all visited Huawei's offices. And so that is one bundle of narratives out there. There's another bundle of narratives that Huawei is where it is through substantial theft from mostly Western companies. And you have also documented a lot of the allegations that Huawei has faced from companies like U.S.-based Cisco, Canada-based Nortel, about technology misappropriation. And I think what is also very impressive about the reporting and the archival research that you've done in *House of Huawei* is that I think you are adding an important third bunch of reasons for the way that Huawei has gotten to where it is, which is that there is tremendous entrepreneurial hustle in this company that is eminently recognizable for its people by anyone from Silicon Valley, that there is just a lot of efforts to make technology and having a very aggressive sales force to push that around the world. So I presented a few bundles of narratives about how Huawei has gotten to where it is, and I wonder if you can help us assess, you know, where, what is the weight here, how do we make sense of all of that?

Eva Dou: These were the kind of questions I was thinking about while working on this project. As a journalist, coming to this as a journalist background, we're always looking for the specific story that tells a broad picture, like the story of a single person that illuminates a broad trend. And so that partly was behind the choice of profiling Huawei because it isn't just a simple answer of just one thing or another behind its success. And that's partly why it's become such a formidable rival to the United States is this hybrid model. And so yes, there's both, there's both the state support, that part has been very important in Huawei's rise. And there's also, yeah, the personal hustle. And beyond the hustle, sort of the corporate culture and the inspiration that the founder has been able to set to sort of lead so many engineers and salespeople to work, to row in the same direction, to work towards a unified goal. And I think very much starting from the first Trump administration and through the Biden administration, U.S. officials have very much been grappling with this question of how do you compete with this hybrid model that sort of takes the best parts of capitalism — that hunger, that raw competition — harnessed with just enormous amounts of state support at a level that U.S. companies find difficult to compete with.

So I think looking through, looking at Huawei's story: it was founded in 1987 at the very dawn of the capitalist experiment in China. And so the state's hand has been there throughout, sort of the state support of this company, both local officials in Shenzhen and national level officials sort of spotted the company as a rising star quite early in their history, really, before they were a known company outside of China. Quite early in their history, state policy banks started providing funding for them. You know, loans that helped them expand first across the country, and then overseas. So that has all been invaluable. But I think the other key thing is they weren't the only company, by far, in China to receive this kind of support. It was very much sort of controlled competition and fostered competition by the state where Huawei had to compete against, at first, dozens of companies that background-wise were very similar to itself. And all of these were starting from sort of the same level, they all had government support and it was through very sharp elbows that Huawei sort of out-competed its rivals and ended up sort of the unrivaled king in the sector in China, and then in the world.

Dan Wang: There is- we're right now living through a moment of still a lot of discussions of Chinese cyber hacking in America, the big campaigns that papers like yours have discussed over the last year have names like "Volt Typhoon," names like "Salt Typhoon," in which Chinese security agencies have penetrated to various extents Western telecom networks, as well as other types of networks.

Can you speak a little bit about how you know, since Huawei is such a big cyber company, how does Huawei fit into these allegations of national security risks?

Eva Dou: Yeah, so I think this is something quite uncomfortable for the companies–both Chinese and Western companies–in this field to talk about. But if you think about it, if an intelligence agency is trying to tap data or trying to survey another country, how are they going to do it? They're going to do it through the phone and internet networks. And these are the networks that are made by these companies. So they are, of course they're going to be targeted and of course they're going to be at risk.

And so what, you've probably seen in the news recently, there's been news of these Salt Typhoon hacks, which U.S. officials have said is the biggest cyber attack in U.S. history. And these are sort of the major U.S. networks which Huawei, in the U.S., long had been sort of relegated to the small periphery. And so this isn't even Huawei equipment that is being discussed. This is, you know, equipment from vendors, Western vendors, companies that were believed to be more trusted. But you can see through it that, yeah, very much this industry is a battleground and that is partly why a lot of policymakers' attention has been on, you know, what companies

equipment do we make or do we use and more recently, you know, is there a U.S.-made alternative for some of this, which has been a very difficult question to answer from a financial perspective in the era of globalization, it's just been very hard for U.S. companies to compete on cost.

Dan Wang: Well, the U.S. is a technology leader. We ought to be good at this sort of stuff, and somehow the U.S. has no compelling answer to Huawei's 5G mobile equipment at the moment.

Eva Dou: I would say the most interesting development is- now there are these new satellite services like Starlink, and that's something that's kind of come out quite unexpectedly, and that the conversation was, you know, that just the math doesn't add up. It's very difficult to make equipment in the U.S. for these networks, and that's partly why you see so much policy interest in Starlink, in Elon Musk's businesses, in satellites now. And that, yeah, this is, it's made in the United States, and they're profitable right now which is something that it seemed impossible.

Dan Wang: You know, I was counting the minutes before Elon Musk would come up and here, here is Elon, here to save the day in yet another dimension. So now the U.S. might have an option to compete on 5G because a lot of times when the United States government was telling substantially developing countries, do not use the Huawei products, do not use its fiber optic lines, do not use its mobile equipment, the developing countries were taking a look at the alternative offerings from mostly Nokia and Ericsson, saying this is substantially more expensive. And that has been one way that Huawei has been able to be so competitive.

I wonder if you can talk a little bit about how else Huawei has been very competitive.You know, what I really enjoyed about the book was that you make clear how much Huawei and its founder Ren Zhengfei has really enjoyed and admired America. That this was substantially a company that looked to America for a lot of different types of guidance. Ren Zhengfei went to Las Vegas and went to Caesar's Palace and loved it, which is perhaps why we have a strange thing of Ren Zhengfei trying to recreate the Palace of Versailles in Guangdong and, this is Heidelberg Castle in Guangdong. And, you know, Ren Zhengfei also modeled Huawei substantially on IBM as a technology leader and management leader, which it was at the time. So that is an aspect of Huawei's culture that tried to copy the best from corporate America.

On the other hand, Huawei is also a very Chinese company. Its management structure is a little bit of a mess. Its ownership structure is totally unclear. Ren Zhengfei reads a lot of Mao Zedong, he cites a lot of military maxims to actually run the company. How should we think about, again, these different narratives about Huawei? How should we assess in which sense it is more Western, more Chinese, or something totally new.

Eva Dou: Yeah, and one reason I love looking at Huawei as a case study is, I think they are such a good example of these sort of internal contradictions. I think anyone who's spent much time in modern China knows it's not just one thing or another, it's very contradictory and it's many things at once. And Huawei, too. Ren Zhengfei has been such a big admirer of the West, and his company was one of the very first private tech companies in Shenzhen that was allowed to be a private company and to try capitalism, which at the time was a scandalous thing, almost, in China. And he very much admired western companies and spent a lot of time in the 1990s trying to learn from companies like IBM and to try to structure Huawei in a similar way, management style, as major western corporations. And at the same time, you know, ultimately, in China, the government is in control, or rather the [Chinese Communist] Party is the highest authority. And so what is different in a company like Huawei, compared to a Western one, is sort of the prominent presence of the Party. And as part of that sort of Huawei following closely with policy, shifts in policy wins at a top level.

And I think you know, Ren Zhengfei, he grew up during the Cultural Revolution. His own father had been persecuted and he very much sort of understood the political risks of getting on the wrong side of Beijing. And part of this company's success has been just being able to sense where policy wins were going in China and making sure to stay in step with them, which meant, in the 1990s, as China was beginning to try to get into the World Trade Organization, Huawei was in the early vanguard of companies that was going overseas, internationalizing. More recently with Xi Jinping's Belt and Road Initiative, Huawei also very much was in step in working on that infrastructure build-out. And yeah, and now they've pivoted towards, you know, they're working on AI, they're working on robotics and these kind of emerging fields, and so I think that kind of swiftness is what made the company successful.

Dan Wang: Now, the critics of Huawei would say yes, of course it is able to follow these policy wins because this is a Communist Party-controlled company that the chairwoman for a long time was someone who was

established, according to Huawei's website, to work for the Ministry of State Security.

Is it the case that Huawei is so good at following policy wins because it is somehow a state-owned company?

Eva Dou: Well, I think for a company working in this field, there's no such thing of, just going totally rogue and not paying attention, not being partly under strictures of the government. And that even is the case in the United States. As part of the book, I also talked to, you know, Western telecom operators and they very much take the advice of, you know, U.S. security services in determining, you know, what vendors they use, things like that. This is a field that touches on national security. And so yeah, I think Huawei, Ren Zhengfei and his leadership team, they've understood from the start, you know, the perils of becoming a sluggish SOE, state-owned enterprise, and they've tried to stay sort of as independent as possible. But at the same time they're very pragmatic, and so Ren has told his employees, you know, you, "you must be patriotic." That's one of the requirements of being in this company. And that's just sort of sound advice for a Chinese executive to give his engineers.

I think if I could turn the tables on you and ask you a question. You've spent a lot of time sort of studying the Shenzhen ecosystem of companies on the ground, also, in your years in China. And I'm curious what your impressions are, both of Huawei and these other companies that have grown up in Shenzhen.

Dan Wang: There are many odd sites in, around Shenzhen, not least of which is Heidelberg Castle, as well as Versailles and all of these recreations. I think that Huawei is a really important driver of China's technology progress in part because it is embedded in Shenzhen, which is an enormous ecosystem of technology production. I think it was, while looking at Huawei as well as these other electronics makers, that I thought, you know, one of the advantages that China has in terms of technology production that doesn't get talked about enough in Washington, D. C., is how much a place like Shenzhen is an ecosystem of technology production.

I've been a technology analyst in China since 2017, and one of my views about technology is that we really have to figure out, distinguish between three different types of things of what we're talking about. Technology is, most obviously, tools, equipment, these are the things that we can observe quite easily. In a cooking analogy, that's the pots, pans, and the stove for actually making something. Technology is, second, a lot of explicit instruction. So, the sort of patents that Huawei is filing you know, anything, that is a blueprint. And so these in a kitchen is the detailed recipe of how to make something.

And I think, third, and most important, technology is, I think, process. Knowledge, which we can also refer to as tacit knowledge, industrial experience, which is represented by a skilled workforce. And that is something that Shenzhen really has. The reason that I think that Shenzhen has become a major technology leader is that there are a lot of people rubbing elbows in Shenzhen to do technology. We have major firms like Huawei, as well as Tencent, as well as DJI in Shenzhen, who are mixing with investors, as well as universities, as well as entrepreneurs, all able to make use of a gigantic workforce to engage in technological production. This workforce, which have become the world's leaders in putting together iPhones one year, then they move on and make Huawei phones, then they go off and then they make DJI drones the third year, and then in the fourth year, maybe they've started an electric vehicle battery, in which case they're able to draw upon all of this knowledge that exists in Shenzhen and does not exist very easily elsewhere.

So I think that is, again, I think you are really good at disentangling what are Huawei's successes, and I think you've also been really good at writing about the raw hustle of a lot of these different companies, a lot of the company employees that sent engineers to different places.

Something I wonder about is you have a lot of Huawei executives that know exactly which way the political winds are blowing in Beijing. But sometimes that gets them into trouble because the winds are blowing in different ways, out of Washington, D. C.. I think it was the *China Books Review* that excerpted one of your chapters with a nice headline: "Huawei Goes to Iraq." And Huawei built a lot of fiber optic infrastructure in Iraq that was eventually bombed by the U.S. Air Force, and Huawei has also spent a lot of time building infrastructure in Iran, there is also some records that it did a lot of stuff in North Korea. How do you view a lot of these actions by the company? What was driving a lot of these actions in dangerous countries?

Eva Dou: Yeah. The line of what's been acceptable to U.S. policymakers for companies like Huawei has been constantly shifting. Most of its history, especially in the early years, Huawei did operate in some of these gray zones and part of that was just out of necessity. They were coming into a very competitive global market with

these established, very powerful players and it was very hard for them to get any orders at first, internationally. The countries where they were able to get their first footholds very often were the ones that Western vendors, for whatever reason, were not there, or were less interested in going to, and these were sort of hardship postings, places where wars were underway, the sites of natural disasters, and it became very much sort of a rite of passage for Huawei engineers who wanted to rise up in the company, that they had to work hardship postings around the world, including putting their personal lives in danger at times.

And, you know, for some of these places, like in Iraq and Iran, it was okay until it wasn't. You know, for years, they worked in these markets and it was sort of fine, and it wasn't until the first Trump administration that it became not fine. And so the issues that the Huawei CFO was detained over actually were, came from, stemmed back years and years ago. And what had changed primarily was Washington's assessment of this company and how much of a rival and a risk that it posed. And that was because of the arrival of the 5G era. So in the 4G era, Huawei still, rightly or wrongly, was seen as kind of like a low-cost competitor. But then 5G arrived, and it just coincided with Trump becoming president, and everyone suddenly realized, you know, this company, they're not just a low-cost vendor, they have more patents in 5G than any other company. And that is sort of like not what people expected and really made policymakers in the West rethink how they were going to deal with this company. Then the case was pursued against Meng Wanzhou, the sanctions violation case, other cases regarding IP theft were also pursued, export controls were put on the company. I think we've all seen this line is moving in real time. Like we see TikTok now is the company that's sort of in the crosshairs. And this was something that even a year ago, if you asked quite serious policymakers, could TikTok be banned, could TikTok be taken offline? It was not an idea that was taken that seriously and you see this line moving rapidly. I'm curious about your thoughts of where this is going in the next few years, as far as U.S.-China tech policy.

Dan Wang: Well, when you have personalities, like Elon and Donald Trump in charge, it is quite difficult to predict these sort of things. Now, you know, there's these big questions. Things are changing in real time. Donald Trump promised tariffs, the most beautiful word in the dictionary, on day one of his presidency. What did we get yesterday? Only the promise to study whether tariffs are effective. And so that already seems like a little bit of a step down, you know, whether they are going to figure out some sort of deal, a little bit hard to say.

What I loved about the book was that, I think you had a line, you know, speaking of natural disasters, entering into disaster zones. Huawei had a saying that, you know, "when others run out, we run in." In the case of the Libya disasters, you know, they sent a lot of, they sent a lot of people into earthquake zones because that was the most important time when mobile equipment has to function, but also when they sent a lot of engineers into countries that will be sanctioned pretty soon,like Iraq as well as Iran, that was a major misstep.

I love these little details that you have. To make it easier to engage in hardships postings abroad, Ren Zhengfei scared up a chef from Chongqing to help the Chengdu-based people from Sichuan to be able to get through by having a home-cooked Chongqing-Sichuan meal at home.

Can you talk a little bit about, you know, how you rustled up these colorful details about a company that isn't necessarily very colorful all the time. And how did you do some of the reporting, some, how many dusty archives did you visit in order to figure out a lot of these details that make the book such a gripping read?

Eva Dou: Well, thanks so much. So part of what made this book possible in such vivid detail is, you know, thanks to Huawei's engineers themselves and that the company has sort of this rare culture of encouraging its employees all the way up and down the chain, from senior executives to to quite junior engineers to put their sort of thoughts to paper, both recording what they're doing in their moment and their job in specific detail and sort of how their job fits into the bigger picture. Both in you know, both this moment in the world that they're living in, both in China and in the world at large. And so that was something quite precious as a research resource.

And part of the motivation of this project for me was to help bridge this kind of language gap, in that there are, I think in, in China for Chinese speakers, sort of this understanding of this company is so much deeper and more nuanced than what has been available to English-speaking audiences. And part of my goal was to sort of make it closer, what the understanding that you would get as an English language reader. And so, so part of it is drawing from, you know, these memoirs of Huawei engineers since the early days of the company to the present day. Part of it also is, you know, just this company, it's not just one company in one place. It really

is a global empire, and in that sense, its story has intersected with so many people and places around the world.

So I consulted, you know, government archives in many different countries, talked to current and former industry officials and government officials around the world. And the research part was sort of a delight in sort of being able to better understand China's relationship with the world through the lens of this company, which Huawei today operates in almost every country around the world. And with very rare exceptions including the United States has, is quite a significant vendor and has significant operations in most countries of the world.

Dan Wang: We will go to questions pretty soon, so think about what you would like to ask Eva. Before we get there, I will ask just one final question about the future of Huawei. Now, when the U.S. government designated Huawei onto the entity list in, I believe, 2020, or 2019, I thought that the company would suffer pretty substantially when the U.S. government denied technologies first to ZTE, Huawei's cross-town competitor, second to Fujian Jinhua, a memory chip maker in Fujian. Both of these companies pretty quickly collapsed without you know, a political resolution from Trump, in the case of ZTE. And so I expected that Huawei would suffer pretty substantially. Here in 2024 nearly half a decade after being designated to U.S. Sanctions lists. Huawei last year was the second-largest handset seller in China, right behind Vivo. And Huawei is still, as best as we can tell, able to make 5G equipment sales around the world, which was sort of the express intention of the U.S. Government sanctions to block. So, talk to us a little bit about the resilience of this company, having spoken to so many industry officials, former employees, having interviewed Ren Zhengfei. What do you understand about the resilience of the company that the rest of us do not?

Eva Dou: Well, I think when the company was first sanctioned under the Trump administration, it very much was an open question to everyone: How survivable is this? In that pretty much no tech company, serious tech company anywhere in the world can really make its products without U.S. technology in some form. That's how interconnected and globalized the world is. And even when China has talked about, you know, having its own tech companies that did not mean at all that it could make these advanced technology products in a vacuum, it very much depended still on technology from all around the world.

And so what this did spur was sort of an all hands on deck situation across China in the high tech sector and in the more fundamental scientific research community to fill these holes for critical technologies. And I think that speaks to Huawei's importance in China's tech ecosystem that they were able to sort of save the company.

And it is, I don't know if thriving is the word, but it's still, it's still going today, pretty strongly. And I think this definitely has accelerated what's called, what people call the decoupling of the U.S. and China tech ecosystems. And that's probably going to continue to some degree in that it becomes sort of self-fulfilling cycles. Like Huawei has recently announced that their smartphones were going fully off Android and to their own operating system this year. And so these, one could argue about if the world is better or worse to have sort of two parallel systems instead of a global interconnected one, but yeah, that, that is sort of the direction we're going.

Dan Wang: Let me reiterate again that *House of Huawei* is a beautiful book, that is not only the best book on Huawei, it is also a revelatory read about the early days of China's foray into capitalism, all of these different compromises that Huawei had to figure out for itself as one of the first companies to be registered as a privately owned company in Shenzhen, and I think you will find a lot of amazing details about Ren Zhengfei, about the company, everyone please give give a hand for Eva Doh and *House of Huawei*.

With that we will go to questions. If you could please wait for the mic so that people can hear you and briefly introduce yourself and please keep these questions short so that we can have as many questions as we can before the author signing in a little bit.

Audience Member #1: Thank you so much for the very, extremely insightful. I'm going to have so many questions, I'm just going to throw [them] out there. You can pick whichever one you want to answer. So, first one is that in 1987, in terms of getting into the business, that's early. And what prompts him? So, first one. The second thing you mentioned that he used a lot of sharp elbows getting in front. What exactly he did? The third thing is that the direct competitor for him would be like Cisco in U.S. How Cisco failed in comparison, or flip side, what is so exceptional about Huawei in comparison? So lastly, is that after Huawei, what are you gonna work on currently? And what you think the United States, the things you think so exceptional happen in China, but the United States government is not paying attention. So that's all.

Dan Wang: Is that it?

Eva Dou: Okay. Just a, just a couple easy to answer questions.

Dan Wang: Easy to answer questions.

Eva Dou: Well, to start with the first one, so why Ren Zhengfei had started this company. You know, at the time it was a pilot program that was beginning in Shenzhen, and so Ren Zhengfei has said that, you know, a local official suggested that he try a startup, which, yeah, I think part of, part of the details is a bit unclear, but he, there, there was both, there was sort of the personal drive of entrepreneurship, and also local officials were sort of going around encouraging engineers with that kind of background knowledge to start, to be part of this experiment at the time. And it was very much an experiment, in that most of the people who did these startups at the time, they were, did it sort of on sabbatical from their state owned enterprise jobs, sort of with the fail safe that they could go back to their job if this failed.

As far as sharp elbows, you know, Huawei has this kind of, had this infamous wolf culture which played out, especially with their rivalry with ZTE, which I think outside of the company, people tend to see them, you know, put them in the same boat as kind of like siblings, but it was very sharp rivalry, they saw each other as enemies. And you know, there are stories of, you know, they would almost tail each other and, you know, an executive would be making a deal with one company, another company would come knock on their door late at night and say, you know, you can't do this deal, I'll get fired. They went to very extreme lengths and for a while salespeople were able to even, you know, make deals at a loss to be able to win them against their competitor.

And yeah sorry what was the … oh, Cisco. You know, I think there definitely were some credible IP infringement issues at the time involving the Cisco case, that was sort of the big first case where a Western company sued Huawei for IP infringement. And another thing was sort of the state financing that Huawei was receiving at the time, I think was very hard for companies in other countries to compete against. It was just enormous amounts of bank loans that they were receiving for the purpose of going out into the world, going across the world. And of course that was a lot of hard work and legwork by their salespeople, but they had sort of as much cash as they needed to do that.

Dan Wang: Seems like the important qualities for the Huawei sales force are first, sharp elbows and second, strong liver because the drinking culture inside Huawei where the ability to show respect for your customer was to get more drunk than your customer. And that was some very nice details of how the Huawei sales force in the Northeast, where the drinking culture apparently is heavier, suffered far more than elsewhere. Another question.

Audience Member #2: Hi, thank you so much. My question is on something that you briefly touched upon, which is the issue of TikTok, right? There, that's kind of the new iteration, if you will, of what happened to Huawei in that they're kind of using the same argument on first amendment argument. And what do you think is different between Huawei and what TikTok is going through right now and some similarities?

Eva Dou: Yeah, I think in some ways it's quite similar in that there is sort of one, always going to be one company at a time that's sort of seen as the top policy priority of the moment. And in the first Trump administration, that company was Huawei, and we're starting the second Trump administration with TikTok very much in the crosshairs. And I think, you know, on the surface, these companies are quite different, you know, Huawei makes very complicated hardware, TikTok makes, you know, a very easy to use, addictive user interface- an app. Sort of what is similar is both of them have to do with the data that is on the back end of these systems. Which I think is not only a U.S.-China issue, it's an issue that policymakers are grappling with quite universally, which is the technologies around us are starting to collect data on all of us, at a much faster rate that policy makers can even understand, you know, what exactly they're collecting and what the implications are.

And you sort of see this through TikTok, also with sort of smart cars, we're increasingly seeing that. You know, all of these things are sort of monitoring people in real time in a way that both consumers and policymakers don't fully understand what the implications of that are.

Dan Wang: Both TikTok as well as Huawei have created a lot of more complex laws in America in terms of legal challenges and regulations. The U.S. Department of Commerce invented a totally new extraterritorial sanction, known as the foreign direct product rule, specifically to target Huawei. And the U.S. Congress passed

a bill mostly targeting TikTok that TikTok took all the way to the Supreme Court. So, you know, don't say that the U.S. government cannot be innovative. At least here, it is inventing all sorts of new regulations to confront the U.S. tech threat. Maybe a question in the front here, Orville. Okay, sorry Orville, you're next.

Orville Schell: Thanks, Eva. It's very interesting. I really look forward to reading the whole document. Most of your discussion tonight is around the commercial aspect of the business. The origin story, this scrappy Silicon Valley mentality, the discipline of IBM, sounds like a company development story. You also talked about the early ecosystem. I remember the days. But there came a point where it became an instrument of the industrial policy for China. And if you can take us a little, because you didn't really talk about this at all, if you could discuss a little bit around when it finally reached a scale where the leadership saw what it meant for national security, for national R& D, for national supremacy, right, because all those things happened, but you didn't really address that transition, and then into the digital silk road and how it sailed with that great amount of capital behind it.

Eva Dou: Certainly. I think Huawei was really part of, part and parcel of China's industrial policy from a very early time, long before it was sort of seen in that lens. And that partly was just because it was not important enough of a company, really, at the time. But even in the 1990s, you know, they were making their own chips, which at the time, Huawei's executives already recognized were a critical technology for the nation to develop. And what we saw even in those early days when they were making sort of rudimentary chips was when senior officials from Beijing came to visit, they always came to visit the chip center. You know, Jiang Zemin himself went to visit Huawei's chip center during the 1990s, and so there was very much a recognition, even at top levels, you know, this is, these are the technologies that are important, and Huawei is one of the companies that is working on them with the help of state funding.

Ren Zhengfei, in his early days, had a saying that, "A country without its own program-controlled switches is like one without an army." And this was something he was saying in the 1990s. Which was also in those early years, Beijing already had started quotas for telephone switch orders between foreign providers and domestic ones. So I think from its very early days, really, it was a part of China's industrial policy. It just wasn't taken seriously until recent years when it had become this global powerhouse, where year after year, it was number one globally in its industry. And not only that, it was filing more patent applications than any other company in the world, in any sector, that its role in China's industrial policy became sort of something widely remarked upon around the world.

Dan Wang: And the digital Silk Road?

Eva Dou: And the digital Silk Road, so Huawei, one thing that I found fascinating about the company. researching it is just how it is sort of everywhere in the world, sort of building out infrastructure and is very much part, in the most recent Xi Jinping's administration, has been part of these global infrastructure projects.

So Huawei in a way, was doing it before these things, these, like, projects had these new names. And so it'll be interesting to see sort of which countries choose to keep Huawei and choose to stop using Huawei in the coming years. I think it'll be a good proxy of each country's relationship to Washington and to Beijing, respectively.

Audience Member #4: You spoke of Huawei's involvement in making chips, and I wonder how both of you look at the chip war. How's each side doing? What are China's prospects of being able to fill in where Americans have the present lead in technology? And how do you think this is going to end?

Eva Dou: You want to go first?

Dan Wang: I've looked at China's semiconductor industry since 2017. And my assessment now is that China is at the very best five years behind industry leaders. If you take, arguably, it is perhaps a decade behind in industry leaders. There are some areas in which China has been able to catch up pretty substantially to the technological frontier. And some of the simpler items of mature chips as well as memory chips, China is pretty close to the global frontier. But in terms of TSMC that is still quite a bit, in Taiwan, it is still quite a bit ahead of what China is capable of. And I think the challenge for China is that it is mostly unable still to make the equipment as well as the software tools to actually produce chips. In terms of the equipment, that is very substantially a foreign affair with ASML in Holland as well as Tokyo Electron in Japan and three companies in Silicon Valley where, and this is the focus of a lot of U.S. diplomacy to make sure that the Dutch and the Japanese are on board with U.S. semiconductor controls. In terms of the software actually needed to design

chips, this is also very complex stuff that is all made by Silicon Valley companies here in America, where the U.S. is able to control these sort of things.

On the other side of the coin is that China has been able to, has caught up on quite a lot of chip production. It is flooding the production of mature chips. So these are chips that are going into electric vehicles rather than the latest iPhones. And that has become a significant problem for the U.S. Department of Commerce because it doesn't really know how to stop the flood of mature chips that are also threatening some of the chip makers here in America. And, you know, there's still a lot of questions about whether Moore's Law has slowed down substantially, whether Moore's Law is already dead, and whether there's much more technological room for these to run. If, in the future, all of the technology leaders have fully stopped their ability to advance then it is a matter of time for China to catch up. The question is whether it can catch up in the relevant timelines. But I think there is, we can't count China down. It still has a lot of cards to play. And even though semiconductors, I think, has been a broadly less successful aspect of Chinese industrial policy, it is pretty critically important and has, it is still progressing quite a lot.

Eva Dou: To just add on to that a little bit, yeah. So one fascinating thing about Huawei that's emerged in this chip discussion is Huawei does not just do one thing well, it does multiple things well. And so it's also emerged as China's most advanced company making, designing AI chips, as part of this.

So NVIDIA, the U.S. company NVIDIA is, of course, you know, the most advanced company in the world, by far, in this area. So China now, with the lack of being able to purchase many of NVIDIA's chips, Huawei is their best domestic alternative right now. And so that sort of speaks to this company's long term strategic vision of getting into sectors that are important now and that are going to be important in the future. And so right now, very much both countries are pouring immense amounts of funds into the chip sector. In a way, the U.S. experiment is potentially even more politically risky in that it's less established of a thing. It's more, for so many years, you know, we have taken a very laissez faire approach to the market, And for the Chips Act for billions of dollars to be going to specific companies in a way that the federal government has set out. It's a very big experiment and, in a way, you know, China is doing this also, but China, it's used to, it's almost used to these cycles of lots of funds going out to companies, a lot of it being wasted, a lot of these companies being, going under whereas if this experiment fails in the United States, that would be sort of a big deal. So in a way, it has to succeed.

Dan Wang: Yes. Other questions?

Audience Member #5: I have a question about what you think of Huawei's future. I think you outlined that part of Huawei's success, as compared to its brother company ZTE or Fujian Jinhua, is that it is able to pivot. So it started when, I remember when I know this company was an infrastructure equipment builder. Now it's like you just mentioned cell phone. A cell phone maker, and it's also becoming a chip maker. What do you think is the future? And furthermore, I have a question about leadership. I think it's a question you touched on at the beginning that its management is not as modernized as it could be. Ren Zhengfei is getting old. His daughter took a hit recently for obvious reasons. Where do you think, does he have a succession plan? Do you know?

Eva Dou: Yeah, I think, for the foreseeable future, Huawei is playing a pivotal role in China's tech ecosystem which, even more so, just in the past couple of years, because with the increase of U.S. sanctions on China which have sort of intensified to the very last days of the Biden administration, that means Huawei each day is that much more critical as the best replacement, domestic replacement for these technologies. And so we do see Huawei. working in many of these fields that are very critical for China in the next few years, including chips, including autonomous vehicles, solar, robotics. Yeah, so I think it's going to be a very critical company. I think succession, that is the big question for any company. And it's been, I think, the best argument in Huawei's favor is that Ren Zhengfei has been thinking about this question since the 1990s and concerned about it even back then. And starting from the 1990s, going around the industry and sort of getting the best advice, both within China and around the world for how do you make a company survive beyond yourself. And so we do see this system where there's dispersed risk. There's rotating chair people and, so in that sense, it's very hard for a single person to take down Huawei through their errors, through an error in judgment. At the same time you know, part of Huawei's success has been Ren Zhengfei's ability to motivate his employees, sort of that spiritual guidance and, well, that sort of X factor in a company, we'll have to see the effect when he retires.

Dan Wang: We're going to wrap this up in a few minutes so that we have the ability to have all of you get your books signed by Eva. So, why don't we take three questions at once and then Eva you can take your pick.

Audience Member #6: Just a quick, more of a, more speculative question. So I just want to see what are your thoughts on the sort of possible technological future collaborations between Huawei and possible, say, U.S. companies. And the reason why I ask this question is because There are instances in U.S. history where like, for example, I think a very clear example would be Russia's rocket technology. At some point of time, Russia's rocket technology was so far ahead of the U.S. that the U.S. sort of abandoned the rocket program, and basically the Space Shuttle has been using the Soviets' engine for the longest time.

So I'm just wondering, at what point does the U.S. sort of stop with this, you know, like blacklisting and everything and get into some sort of collaborative mode with Huawei on sort of, say even technological equipments or telecom equipments on this end. Yes. Another question.

Audience Member #7: Yeah very quickly. There's this really interesting part of the story which we haven't really touched on, which we we talked about a bit about semiconductors and the U.S. throwing its weight around and trying to get allies in line. There was a really fascinating chapter in the country I'm from in the U.K. where you know the U.S. put pressure on the British government to rip out all of the kit that it put in and do this big swap out of Huawei equipment. How did that play out with different countries and who pushed back when the U.S. was trying to get this big revision and this extremely expensive process going of ripping all of this stuff out.

Dan Wang: One more question before you answer.

Audience Member #8: Thank you for taking the time to speak to us today. I learned a lot from this talk. I was fascinated when you were talking about Huawei expanding its presence in countries that were otherwise avoided in the U.S., whether it's Iran, Iraq, North Korea. I was wondering where do you expect Huawei to expand cooperation and collaboration, whether in particular countries or regions, or with companies that are more amenable right now than U.S. companies?

Eva Dou: Thanks so much for these questions. So they are kind of related. So, the first one about collaboration in the U.S., I think it is a very difficult environment for that, political environment in the immediate few years, in that sort of just the lingering and broad security concerns about Huawei make it, I think, very politically unpalatable for U.S. companies to be sort of attempting new cooperations with it at the time, at this moment, in a way that probably for is not the case for all Chinese companies and that there has been sort of discussions of among people in Trump circles of, you know, shouldn't we be attracting companies, foreign companies to come bring their IP and to come bring their technology to the United States. So I wouldn't rule it out with other companies. I think Huawei is one of the hardest ones to try to be making these collaborations at this moment.

As far as the U.K. and other countries you know, the U.K. was the big one that the first Trump administration was, got them to flip their opinion by, on Huawei, by applying quite concerted pressure whereas the U.K. government's stance for years was that the risk was containable and acceptable of using Huawei, Huawei's equipment in certain systems. And they sort of abruptly reversed that, due to sort of concerted efforts by the Trump administration. And, you know, aside from the U.K. government, the first Trump administration did not have that much success, really, in pressuring other countries around the world to stop using Huawei equipment. And part of that is simply, they're, this market's so consolidated, there are very few alternatives. There are basically no alternatives at a same cost. But it's something that the Biden administration has taken up, had taken up and continuing as part of its diplomacy to try to push countries around the world to stop using Huawei equipment, something we'll likely see continue under the next Trump administration.

And as far as partnerships with other countries, you know, Huawei is very much in a phase of defending its existing turf as opposed to being able to expand further. And so, sort of the mainstay of its international business has been sort of emerging markets and countries that are maybe a little quizzical of the U.S. government. And so those are probably the areas of the world that Huawei will, that will continue to be the mainstay of Huawei's international business. And we do see sort of increased efforts by the U.S. government to put pressure on those countries as well. Like, one of the Biden administration's last acts in office were these AI export quotas, which in a way are quite extraordinary, where usually sanctions are sort of direct to the country. You would sanction Iran, or you would sanction China, or Russia, and this, there sort of essentially sanctioning

almost all of the world, and limiting US AI exports around the world with precisely this goal to limit this technology from getting to, to Huawei through countries, other countries that it's working in.

Dan Wang: We live in extraordinary times. Eva is around for book signings. If you have any more questions please direct it to her. Please join me again in thanking Eva. ∎