nives Section:

Chen Qiufan on Science Fiction as a Weapon of Storytelling

The writer talks about why technology is the only valid tool we have right now, how sci-fi is becoming too conservative as a genre, and China's big data advantage.

BY JORDYN HAIME - FEBRUARY 6, 2022

Stanley Qiufan Chen is an award-winning science fiction writer, translator, and columnist. Chen, who was born in Guangdong Province, has written more than 100 stories, some of which have appeared in Wired, Clarkesworld, Slate.com and GQ, as well as two books. His most recent book, <u>AI 2041: Ten Visions For Our Future</u>, is a collection of stories that explore how AI will impact our everyday lives within 20 years. It was co-authored with Kai-Fu Lee, computer scientist and former president of Google China. Chen has also worked for Baidu, Google, and Noitom Technology, a VR startup. He is now based in Shanghai and runs Thema Mundi Studio, a sci-fi content development project.



Chen Qiufan. Illustration by Lauren Crow

Q: What made you want to switch from working in the tech industry to writing science fiction?

A: Actually, it was the other way around, because I was always a sci-fi fan since I was a kid. I started to write at around eight or nine and started to publish when I was 16. Science fiction drove me to become a tech person. I read a lot of science fiction back in the day; it drove me to think like a tech person. Working in a company like Google used to be my dream as a young person, so that gave me a lot of inspiration to write more. It was pushing me toward becoming a full-time writer 5 years ago; at almost the same time Ken Liu, the translator of *The Three-Body Problem*, and also my best friend, quit his day job as a legal consultant on tech. We were all tired of being employees working for tech giants, so we decided to quit and write for ourselves.

Do you remember what the first story you published was?

Yes, it was back in 1997 in the magazine *Science Fiction World*. It was called "The Bait," and talks about aliens that come to earth, but instead of violently invading society, they provide a lot of fantastic, super-advanced technology to fulfill the demands of the people. But it's actually setting up a consumerism trap, people step into this trap and become enslaved by the alien civilization. It's something very similar to what's going on right now, people being enslaved by technology.

A lot of the stories in *AI 2041* are pretty optimistic; more optimistic, I think, than a lot of other science fiction. Do you see technology going in the right direction right now?

People have different opinions on the book. Some people tell me, this is the darkest story I've ever read. And some people will tell me, this is pretty bright, pretty optimistic. At the very beginning, when Dr. Kai-Fu Lee and I sat down to discuss how this book would unfold, we decided to make it into a more positive one, because we think it's urgent for people to come back to the fact that we need to use technology to help us to conquer or confront the challenges ahead of us. Right now it is the only valid tool we have in hand.

Both of us read or watched so many science fiction works back in the day, and AI or robots were always described as some kind of dystopian image, as in *Terminator* or 2001: A Space Odyssey. Both of us think this creates a false narrative for the mass audience. It's important to help people build up a more objective, more realistic mindset on technology, especially on AI. We can create an atmosphere for the younger generation to study and to devote themselves to this scientific research area in the future.



Chen is the co-author of *AI 2041: Ten Visions for Our Future* (2021), alongside Kai-Fu Lee, the former president of Google China. *Credit*: <u>AI 2041</u>

There are so many big tasks ahead of us, like climate change, like the pandemic; you have to help people to understand all these externalities and also the ethical issues behind the scenes.

Right now there's some bottlenecking, some restricting of the development of AI and other technologies such as scalable clean energy. But if we stop pursuing the development of technology, there is no exit for human beings to get through to the next generation. That's the high hope of the book.

Are you worried that new regulations in China, particularly on tech and businesses, could stunt creativity and progress?

Especially last year, China launched so many regulations on its tech giants, also on how to regulate the application and implementation of data usage and other technologies. But this is not happening only in China; it's also taking place in Europe — as with its GDPR rules — and also in the United States. So right now, China is catching up. Before that, AI was massively applied in the society in China because there were few regulations on the usage and collection of private data, which is kind of risky, especially for ordinary people. They don't know how their data is going to be used. So it's kind of concerning for the government as well.

I think it's important to help people build up a more objective, more realistic mindset on technology, especially on AI. We can create an atmosphere for the younger generation to study and to devote themselves to this scientific research area in the future.

"

I think it's the right thing to do for now. I have some friends doing policymaking in the government; some of them were consulting experts and people from different areas, who will make sure it's not going to become so extreme as to slow down the pace of innovation. They will also make sure technology is beneficial for the masses, for the common good. It's too early to say we are making everything right, because technology is always developing faster than policy, and the government is only catching up. And I think they need more input from different areas such as anthropology, sociology, and psychology. We need people from different fields to sit down together, like at the <u>Macy conferences</u> back in the day, to invent cybernetics. We have to discuss these big issues, big problems, in an interdisciplinary way, and that's how we make it accurate and legitimate. We're just beginning to do so.

As you said, China is talking a lot about how AI should be governed. The government <u>has</u> <u>drafted principles</u> for "trustworthy AI" certifications as well as ethical guidelines for AI. Do you think these kinds of regulations coming from the top will be effective?

In China, policymaking is always from the top down. But in the future, we might see some bottom-up policymaking emerging from the localities. I attended a conference on AI governance hosted by the UN and Tsinghua University in December where we were talking about experiments in AI governance in China right now, even in the countryside. In the future, if we build up this kind of autonomous governance system, there will have to be some policy or regulation-making emerging from the bottom up because it's more adjusted to the locality. There are different situations and different problems across China,but all the data is local, and all this kind of interaction is happening according to the people and culture of each area, because China is so huge. It's diverse culturally and economically, and local governments have their own habits, their own momentum and historical legacy to deal with. So in the future, we will discover or we will invent a new combination of policymaking on AI governance both from the top-down and bottom-up. China definitely will be the one leading the train. That, in my opinion, is for sure.

What do you think are some of the conditions that have allowed China to become so advanced in technology and AI? How has China been able to achieve this?

| BIO AT A GLANCE | |
|------------------------|-------------------------------|
| AGE | 40 |
| BIRTHPLACE | Shantou, Guangdong |
| CURRENT POSITION | Founder of Thema Mundi Studio |
| PERSONAL LIFE | Not married |
| | |

First of all, it's the data. We have a huge population. And right now we are collecting data individually and on a massive scale across the country, in different areas. So this huge data set has helped to train the algorithms, the AI to become smarter and smarter. And secondly, I think that the infrastructure, as with electricity and internet

accessibility, is flattening the differences between the city and the countryside in China, helping people to get the benefits from the technology. In the future, AI services could be running like tap water or electricity. You can use it everywhere in China. So that's also helping the platform, the system, to collect even more data.

Right now, we are facing the same problem, no matter if it's China, the U.S., or other countries doing AI. We are lacking in fundamental research to understand how it can work better — for example, how we can run it with a very small amount of data and a very low energy cost just like our biological brain does. That's something waiting for the scientists and engineers to solve in the future; how we can have a more sustainable system. Because right now you can see all this computational power is super energy-consuming and most of it is fossil energy. So it's totally against our goals to fulfill <u>carbon neutrality in 2060</u>. This is more urgent than anything else in the future.

Are you worried at all that we're almost moving too fast and not taking enough time to solve these issues?

Sometimes, we're moving too fast, but sometimes I fear it's too slow because of everything that's happening around us in the world. It seems like the planet has its own pace, its own response to what's happening right now. If you take <u>the Gaia hypothesis</u> from James Lovelock, back in the day, it seemed almost like science fiction. But now everyone likes to believe it is real on a certain level. Because most of the technology right now is invested in by venture capital, there is a drive for it to be scalable in an accelerating way. It's just repeatedly reproducing itself just to make more money, to become more profitable. But maybe there's some other way that people just didn't pay enough attention to yet. It may take a longer time to make the breakthrough and require even more investment. We need the United States to step in if that is the case, to be the key stakeholder and driver, because this long-term investment will determine our future.



Gaia, the Greek goddess of the Earth. The Gaia hypothesis, conceived by chemist and inventor James Lovelock, posits that the Earth is maintained in a habitable state by self-regulating feedback loops that keep its conditions habitable for life. *Credit:* <u>theOI</u>

Given all of the benefits to collecting so much data — there was so much great information in the book about how all this information can help reduce the cost of healthcare, for example how do we make sure that people are still maintaining their privacy?

Dr. Kai Fu-Lee has this idea for a technology called <u>federated learning</u> that can solve the problem. The story "The Isle of Happiness" [from *AI 2041*] talks about the middleware solution, which tries to ensure you do not put all your private data on the platform of tech giants; there's some middleware service connecting in between. That means you can use all your data across different platforms; meanwhile, you can protect your own privacy, just like what we have been talking about recently around <u>Web3</u> and crypto. It could be one of the solutions in the future, but not everything is ready yet, like the technology itself or the infrastructure or policy. Even the mindset and understanding of the people is not ready yet, but we can see that the train is coming. All of these possibilities could be fully developed and invested in within the next two decades. To make sure people can ultimately get rid of this kind of concern — whether their private data will be misused by the tech giant platforms — we need to have better control and even smarter ways to use it to provide even more benefits to our daily life.

We know that in places like Xinjiang the government has been using its most advanced technology to track and detain Uyghur Muslims. What can be done about governments that have the power to regulate AI, but instead choose to use data for their own benefit?

All across the world, we have the same problem. The government is becoming more and more powerful because this kind of extreme scenario happens and it's pushing people to give up their rights to the state. I don't see an alternative right now, especially during this pandemic. Of course, we have different responsibilities and we have different options to control the pandemic, but as we can see, there's a historical trend for governments to centralize and become more dominant over private data, with all these kinds of behavior tracking systems. So unless we invent something new, something alternative to capitalism and the modern governance system, I can see the train will accelerate in the future. Ultimately, there'll be war. There'll be extremism in different societies. It will be the doom of human civilization unless we come up with something new. Right now, science fiction is becoming too conservative because, from a sociological perspective, we haven't really come up with any kind of new imaginative forms of how to structure and mobilize the people. That's something we need to keep up with.

I was going to ask about science fiction in China. I think some people would say it has been pretty strong in recent years, but it sounds like you disagree with that. Why?

I think Chinese science fiction has been prominent over the previous decade after *The Three-Body Problem* won the Hugo award. It was getting so much attention across society. And there was huge interest from different parties, from the commercial sector and also from the state. And right now there are hundreds of thousands of young people trying to become science

MISCELLANEA

| BOOK REC | <u>Novacene: The Coming Age of</u> <u>Hyperintelligence</u> by James Lovelock |
|----------------|--|
| FAVORITE MUSIC | Electronic |
| FAVORITE FILM | 2001: A Space Odyssey |
| PERSONAL HERO | Stanley Kubrick |

fiction writers because there's a huge competition for writing science fiction happening every year country-wide. Its momentum is snowballing right now.

But I still have to say there's not enough diversity in the writing, be it the style, or the topics or issues it discusses. For example, minority or gender issues, or ethnic issues. Because we have this tradition of putting science and technology ahead of literary and maybe human issues. It is so important to use science fiction as a weapon of storytelling to uncover more of today's hidden realities. So people are still trapped in the golden age, like what we read when we were kids — Jules Verne, Asimov, Arthur C. Clarke, Heinlein, all that classic 'good old days' stuff. We need more new, progressive writing to explore more possibilities of society in the future and humanity, for sure. So there is still a way to go. It is far away from what I can imagine.

Your answer to the previous question got me thinking about how the U.S. and a lot of other major Western countries are becoming hostile to cooperating with China. When it comes to tech and advancement and technology, should we be cooperating more with China, or is it better to take a stronger stance on some of the negative things we are seeing emerge from technology in China?

We have to step back to see the bigger picture. The much more urgent issue out there waiting to be addressed is the climate change that is threatening everyone and every living creature on this planet. Disconnection and non-cooperation are not smart. All we can do is to think beyond all these binaries across culture, geopolitics, and ideologies, to think as a whole civilization, as a whole species. Then we can come up with some smarter solutions. Otherwise, we will fundamentally be trapped and killing each other. And finally — as was hilariously described in the movie *Don't Look Up* — we will basically go extinct. Just like the dinosaurs. There's something that Chinese ancient philosophy, Taoism, has taught me in the last two years: you have to think and act pretty much like water: be flexible and adaptable.



Jordyn Haime is a Taiwan-based freelance journalist who writes about religion, culture, and geopolitics. She is a graduate of the University of New Hampshire, where she studied journalism and international affairs. As a Fulbright fellow, she researched Judaism and philosemitism in Taiwan. *@jordynhaime*

COVER STORY



The 5G Fracture

BY LUKE PATEY

It is business gospel in the West that for a corporation to be globally competitive, it must be competitive in China. But what happens when an international company loses the chance to compete in the world's second largest economy? The Swedish telecommunications giant Ericsson shows a possible post-China future may not be as bleak as imagined.

THE BIG PICTURE



Semiconductor Shakeup BY ELIOT CHEN

A look at key concepts in the semiconductor supply chain and what recent events mean in the competition over its control.





Hal Brands On Navigating America's "Danger Zone" With China

BY BRENT CRANE

The scholar talks about his new book; why China's best days are behind it, both strategically and economically; how that could lead to China lashing out; and why he fears U.S. strategy isn't coming together...



Visit News Products Store

News Products

Our best open-source research on Chinese companies, as well as industry guides to 100 of the most influential people in a China-focused industry.

The Wire China Archives

Read More Articles >

