



CHINA'S NEXUS OF STATE, BUSINESS, AND SCIENCE

AN INTERVIEW WITH SUSAN GREENHALGH

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OBSERVATIONS

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A short interview with a distinguished scholar to showcase their career trajectory, expert knowledge, and current research interests in science and society in China.

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Susan Greenhalgh is the John King and Wilma Cannon Fairbank Research Professor of Chinese Society in the Anthropology Department and Fairbank Center for Chinese Studies at Harvard University and a senior advisor to the Lise Meitner Research Group. A specialist in the connections between Chinese science, politics, governance, and the state, she is author of *Just One Child: Science and Policy in Deng's China*, and co-editor of *Can Science and Technology Save China?* As a follow up to her Berlin Contemporary China Network talk "State-Science-Society: Tangled Ties in China's Plans to Become a Science Superpower" (Nov 16, 2023) members of the LMRG interviewed* Susan about her new book on the corporate distortion of science in the US and China, distinctive features of "Chinese science" and the nexus of state, business, and science in China as well as how she finds her research topics and how they have shaped her impressive career as an anthropologist.

*The interview for this publication took place on February 9, 2023. Susan's responses have been shortened and edited for this publication, with the author's approval.

LMRG: You've had a very prolific career, working on multiple topics in different locations. How did you approach your topics and choose the different methodologies you've employed in various projects?

Susan: Finding a good topic is the most important and challenging part of research. For me to take on an issue, I need to be really engaged with it. That means it needs to be an issue I find ethically troubling. I also have to have unique access to a set of data that allows me to go into the subject in great depth. In most cases, those include data I've collected myself.

Over my career, I haven't so much chosen topics and research methods, as the topics have chosen me, and the methods have followed from the topics. They have tended to arise out of life circumstances. For example, I never intended to write a book on the origins of the one-child policy (*Just One Child: Science and Policy in Deng's China*, 2008). How I happened to do so is a long and rather convoluted story. I had spent seven months doing fieldwork in three villages in Shaanxi mapping out the political economy of family and fertility over the decades since 1949. I was then working as a researcher at the Population Council in New York City. The Council had a de facto no-book policy.



Wall slogan: 严格控制二胎 (strictly control second births) photographed in a rural area, Xianyang City, Shaanxi, China. Author: Susan Greenhalgh, (1988).



Wall slogan: 坚决杜绝三胎 (resolutely stop third births) photographed in a rural area, Xianyang City, Shaanxi, China. Author: Susan Greenhalgh, (1988).

A few years later, I moved to an academic post and began working hard on that book about the villages. But my labors were interrupted by a life-altering medical incident in which a rheumatologist mis-diagnosed me as having a lifelong pain condition, and then, through his treatments, managed to create a facsimile of its symptoms in my body. The result was eight months of unmitigated pain, confusion, and distress. It took about a year to figure out what had happened and rid myself of the symptoms. But I was deeply disturbed by what had happened: a doctor, whose job it was to heal, had instead created a life-threatening disease in my body. I felt an urgent need to undertake a book project that would provide space in which I could make sense of how my life had unraveled so completely (*Under the Medical Gaze: Facts and Fictions of Chronic Pain*, 2001).

Once that was behind me, I set about writing my “China book.” Because I had been trying to write those village chapters when I was very sick, I found I could not go back to the political economy project. But I had to write some book on China; what would it be?

Thirteen years after my village fieldwork, I embarked on a completely different project—on the origins of the one-child policy, an ethically troubling issue if there ever was one. Where did that idea come from? I had been immersed in the literature on governmentality. Those works encouraged the writing of “histories of the present,” histories that traced, step by step, how the “truths” of today came into existence. I actually had the data I would need. As a population council researcher, I had traveled to China year after year and spent many long hours talking to the scientific architects of the one-child policy. I realized I could draw on those interview notes, and one new set of interviews, to ask a question no one had systematically addressed: how did China’s leaders come up with the bizarre idea of limiting all couples in a society of 1 billion to just one child?

The research methods followed from the topic. They involved primarily interviews with all the actors I could access, as well as study of various Chinese histories and compendia of population matters and Chinese journals published at the time. The analytic methods I used to interpret the data followed from foundational theory in Science and Technology Studies (STS). The strategy was to place the scientists center stage, distinguish three relatively distinct “sciences of population,” compare them along key dimensions, and then track the political battles during which one group hijacked the process to ensure that its extreme policy of one-child-for-all starting immediately was the top choice of the political leadership. In retrospect, this seems like a logical and obvious way to proceed, but at the time it was a radical move to place the scientists and their graphs, charts, and equations at the center of policy making and to call the competing views on policy distinct sciences.

LMRG: In your work you’ve often emphasized that science in China has some distinctive features and that these features change over time. Could you help us understand what some of the most important changes have been?

Susan: In *Can Science and Technology Save China?* (2020), I argued that Chinese science is distinctively Chinese. That statement seems unproblematic to me, but I want to reformulate it to avoid misunderstanding. I start with a basic premise of STS that science is humanly made and reflects the conditions in which it is made. Key questions include: Who is making it? Within what organizations? In what political and cultural context? At what point in historical time?

In the wealthy liberal societies of the West, differences in culture make for somewhat different formations of science. But these countries—those of Western Europe, North America, Australia, Japan, and so forth—share liberal democratic values and systems, and so the differences among their sciences are likely to be relatively modest. China is different. Its political system is unique and it is so unlike the liberal orders of the West that the stamp it puts on the country's science and technology is quite noticeable. Chinese science and technology innovations deserve our closest attention because China is striving to be a global science power by mid-century and its advancements in these areas are becoming major forces in world affairs. Those are the basic premises from which I start.

How do China's distinctive culture and political economy imprint on China's science? A major problem we face in trying to generalize about Chinese science is the dearth of information, especially about scientists' micro-processes by which they "make science" in their labs, offices, and other sites. The ideas I share are based on my own research on the social, demographic, and health sciences, as well as reading of the existing literature. I offer these ideas not as fixed truths, but as working hypotheses that I hope others will add to with new data and interpretations.

Let me mention a few of the ways China's cultural and political context are likely to imprint science in the reform era (1978–present). The sorts of features I will mention emerge most clearly when our research design calls for taking the scientists as the object of analysis and viewing them "in action." Researchers who study China's science in a more distanced way may discover other dimensions along which it stands out as unusual.

First, in the reform decades, science has been largely a tool of the state created to serve state-defined goals. What this means is that for many Chinese researchers, the aim has been not so much to discover "the truth" as to improve public policy or solve a technical problem prioritized by the state. Second and relatedly, most scientists work in state-run organizations whose projects are assigned and funded by the state. In science, as in everyday life, the state establishes the political discourse in which things are to be talked about. These researchers are essentially state employees whose language, including scientific language, should not exceed boundaries of politically acceptable discourse set by the state.

A third feature is that the political norms and practices of the party-state shape how science is made. The contributors to *Can Science and Technology Save China?* found that negotiating with a government official was a routine part of science and technology making in the 2000s and 2010s. These negotiations affected such things as how scientific decisions were made, what data were and were not available, and which projects should be prioritized over others.

In my work over the years, I have been fascinated to see that for most researchers, the highlights of their career have been times when their ideas have influenced official policy, especially at the central level. Most have been eager and proud to help officials formulate policy. That's because the political rewards they enjoy are so great, and because state projects also (at least theoretically) advance the interests of the Chinese nation.

With the rise of private industry, growing numbers of scientists are working in non-state settings. The possible influence of the state on corporate science could work via party cells or perhaps

personal ties to officials. How and how much the state influences corporate science are empirical questions about which little is known. I have not worked with scientists based in private industry, but hope more colleagues will do so as time goes by.

You asked about changes over time. As a first-order answer we can propose that, if science is contextually shaped, we should see shifts in some aspects of science making from administration to administration, that is, from the era of Deng Xiaoping to Jiang Zemin to Hu Jintao to Xi Jinping. Changes in administration have brought big shifts in the context of science, from the role of the market, to the permissible contact with the outside world, the use of (or prohibition on) certain terms, and the openness of the party-state to the participation of scientists in the policy process. There is much research to be done to fill the gaps in our knowledge around these changes from decade to decade.

The main takeaway is that it's not the science that's distinctive, in the first instance, it's the context. If you look at the science—the numbers, hypotheses, equations, and so on—it's likely to look very much like science anywhere. I would not say that Chinese science is distinctive; I would say that science created in China is imprinted by that unusual context in what we can expect to be systematic ways. There is evidence that the context shapes *how* science is made. It may affect the *content* as well, but as yet we have no evidence on that question.

LMRG: In your BCCN lecture you also mentioned the influence of business and politics on science. In Western democratic contexts, corporate power is often criticized for its influence on science and policy making. How do you think the anthropology of science and technology in China can help us think about relationships between politics, business, and science in an authoritarian political system?

Susan: This is a big and complex question. I have proposed that, at the heart of power in China lies a nexus of three parties, state, business, and science that are tied together by shared political and economic interests and personal *guanxi* ties. In his book *Red Roulette: An Insider's Story of Wealth, Power, Corruption, and Vengeance in Today's China* (2021), Desmond Shum gives us a glimpse of the nature of the ties between two of these parties. It's a story of wheeling and dealing among the top political elite and very wealthy businessmen in which they exchange lavish banquets for lucrative business deals. What helps hold them together are deep *guanxi* ties in which everything is based on trust and nothing is written down. What's missing are the scientists.

How can we access these knots of power ethnographically? The key is to talk to the scientists who, as partners in the enterprise of global science, are often much more willing to talk to researchers than government officials or business executives are. By talking to the scientists or technicians about their projects, we can often discover how they're connected to party-state officials and businesses—both of which may fund their work and even commission their research—and how those other domains operate. Another important dimension of political influence is silence. As the party-state controls the allowable political discourse, there are things that scientists know they should and should not say. You can say things that align with the state's official discourse, but many other things tend to be left unsaid. This politically-induced practice of silence is often audible in the repetitive phrases that are meant to suffice as an answer. There's so much that we

don't know about China's politics; the practices of voice and silence provide really important clues. By strategic questioning of and an awareness of this silence, we can slowly put together a picture of how the three parties intersect and why it matters.

In the Coca-Cola story I've been working on lately, such a three-way knot of power existed at the peak of the health science and policy establishment. The top scientist on obesity and related chronic diseases was a former high official in the then-Ministry of Health. She was at the same time the head of the branch of a scientific nonprofit organization that was based in the US and funded by the food industry. Its mission, I gradually came to understand, was to create science that protected the interests of food manufacturers. So, China's top scientist of obesity had dual identities and major conflicts of interest, which of course were not acknowledged. But because she had excellent guanxi with officials at the health ministry, she was able to create China's first two major policies on obesity and related diseases. These policies protected industry by emphasizing exercise, rather than limiting the consumption of junk food and sugary drinks; and by omitting taxes on soda. Those policies worked to protect the food industry, but because their creator was well-connected and a de facto official, no one questioned her. In this knot of power around diet-related chronic disease, we have one central figure who brought together all three parties.

My hunch is that such knots of power connected by mutual economic and policy benefit and guanxi ties exist not just at the political center, but at multiple levels in the political system, including levels we as social scientists more commonly study.

LMRG: You are currently reworking an academic monograph into a trade publication for a general audience. What are some of the challenges you've encountered in crossing the boundary between academia and the general public and how have you dealt with them?

Susan: This an important question. Presses are under a lot of financial pressure these days and editors are looking for books that can reach wide audiences. But as academics we are not trained to write popular books!

The challenges have been enormous, and they've involved tradeoffs I hadn't anticipated. I spent 17 months writing up my research on Coca-Cola's project to create an industry-friendly science of obesity in the US, to try to get it endorsed in China, and then embedded in Chinese health policy. The editor I took the manuscript to was eager to work with me on the book, but only if I rewrote it as a trade book! And so, I spent the next seven months rewriting it from top to bottom.

One challenge was to redirect the book to the kind of readership my editor imagined. She suggested that readers in the US would be interested in things that affected them personally. In her view, that would not include China. And so, she asked me to rebalance the material so that China occupied no more than half the book (it originally took up two-thirds of the text). To do that, I had to cut some China material and conduct new research on Coca-Cola in the US. I also had to subordinate the China story to a larger, global narrative about corporate power and transnational science. The revised version works better as a book, but I regret having to remove discussion of a number of China-specific concerns.

The book originally engaged with three fields of study: STS, medical anthropology, and China Studies. To make it more reader-friendly, I had to simplify the arguments. I did that by dropping everything except STS. This made for a more unified narrative, but I've lost the conversations with my other fields.

To make the prose more engaging, I had to remove all the text that was strictly academic, including the conversations with different scholars. I also went through the text breaking up long paragraphs, deleting long, pedantic words, and choosing more colorful and lively words with which to tell the story. That was a lot of fun. Overall, it was a fascinating and (mostly) enjoyable project. I hope not just the general public, but also scholarly readers will like the new book.

LMRG: Thank you so much, Susan, for sharing your wealth of experience with us.

Books and Recent Publications

Greenhalgh, Susan. *Coca-Cola Goes to China* (forthcoming).

Greenhalgh, Susan and Li Zhang. *Can Science and Technology Save China?* (New York: Cornell University Press, 2020).

Greenhalgh, Susan. *Fat-Talk Nation: The Human Costs of America's War on Fat*. (New York: Cornell University Press, 2015).

Greenhalgh, Susan. *Just One Child: Science and Policy in Deng's China*. (California: University of California Press, 2008).

Greenhalgh, Susan. *Under the Medical Gaze: Facts and Fictions of Chronic Pain*. (California: University of California Press, 2001).

More Information

Learn about Susan Greenhalgh:
<http://susan-greenhalgh.com/>

Find the paper online:
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