

Social sciences

with The London School of Economics and Political Science

Talking points

1. “You can build a brilliant tool, but incentives, culture and norms decide whether it helps, harms or lasts. For example, vaccines save lives only when people trust them. Innovations are born in environments where people feel free to share their ideas. Social science gives us the insight into what people will actually use, methods of measuring progress, and models of how ideas spread.” – **Professor Michael Muthukrishna**

Why do you think Michael believes that innovation requires freedom to share ideas? To what extent do you agree with him, and why?

2. “All academic disciplines are important as they each contribute a fundamental piece of a jigsaw that, when put together, comprise the current state of what we know about the world and each other – and could not be complete with pieces missing.” – **Professor Elizabeth Stokoe**

When have you combined knowledge from different subject areas to approach a project or solve a problem?

3. “Philosophers, sociologists and researchers in science and technology studies have challenged the idea of objective knowledge and facts, which is a good example of how social sciences can widen our understanding of what STEM (science, technology, engineering and mathematics) is and does. Social and power dynamics are always present, no matter how controlled or scientific the environment.” – **Dr Nils Peters**

Reflecting on the team’s different research projects, what are the social and power dynamics related to artificial intelligence?

4. “The development of science and technology is socially embedded and should be oriented toward the

betterment of society. Social science provides theoretical and methodological tools that help us to understand the functioning of human society and envision STEM grounded in human values.” – **Professor Bingchun Meng**

What do you think Bingchun means by ‘STEM grounded in human values’? What do you think these values are? Give an example of technology that you feel has been developed with human values in mind.

5. “Innovation is shaped by people. The technologies we end up with depend on the policies governments adopt, the investments firms make and the priorities societies set. While STEM tells us what is scientifically or technically possible, the social sciences explain which of those possibilities we should choose to pursue. If we care about shaping the path of technology, the social sciences are essential. They make clear that the future is not predetermined: it depends on our choices.” – **Dr Eugenie Dugoua**

What do you think should be society’s priorities, at the moment? What choices should society be making, and why? How could AI and social sciences help us meet these priorities?

6. “Many of the issues we are facing are not just engineering problems anymore but require a combination of engineering and social sciences. For example, in the past, Facebook engineers were oblivious to the fact that foreign actors could or would try to use the platform to help influence elections.” – **Professor Tom Kirchmaier**

Which societal problems require a combination of engineering and social sciences to solve them? Refer to examples in the article as well as others you can think of.

More resources

The London School of Economics and Political Science has produced a series of videos and podcasts to help you learn more AI and social sciences:

 **Webpage:** lse.ac.uk/DSI/AI

 **YouTube:** youtube.com/playlist?list=PLK4eIntcUEy1_ckZz-Q1KjWvVSVOFXkh9

How did the LSE researchers become social scientists?

Michael

"My brother, Daniel, is an astrophysicist who studies the origins of the Universe. We like to argue about which science is more fundamental. He says physics, as what could be more fundamental than the Big Bang? I say not only are people harder than particles, but what is more fundamental than the origin of the Universe is understanding why humans ask that question at all! At the core of everything humans build, trade, fight over and cooperate on are psychology, human evolution, and the cultural differences between societies. I study psychology to learn about how minds and cultures work so we can tackle some of the biggest problems we face: climate change, conflict, and the need to create a world where more people can develop their talents and contribute to what our species achieves."

Elizabeth

"After my psychology degree, I got a PhD studentship with my fabulous supervisor – Dr Eunice Fisher (who is now in her late 80s, and we're still very much in touch). She was a cognitive psychologist interested in interaction and learning, and didn't do conversation

analysis herself, but the project we worked on together involved the collection and analysis of undergraduate student tutorials and seminars. She used the data to address particular questions about cognition, and I got really interested in gender and interaction. Sometimes it is a mentor who starts us on a path we didn't know we wanted to follow!"

Nils

"During the Euro debt crisis of 2011, I wanted to understand better why these economic crises happened and challenge some of the narratives presented in the media at the time. Having started out studying economics, I switched to political economy which considers historical factors and is focused on shifting power dynamics."

Bingchun

"I have always been interested in symbols, representations and meaning-making. However, I was also deeply drawn to the explanatory power of social theory. Media and communication seems to be the perfect interdisciplinary research area that combines both aspects for me."

Eugenie

"I was first drawn to understanding how the world works and why economic development looks so different across countries. From there, thinking about environmental issues felt like the natural next step – because the future of the

global economy depends on how we manage resources, pollution and climate change."

Tom

"I was always inspired by economics, how an economy works, and how the 'invisible hand' manages to organise something so complex as an economy without active management. I am fascinated by how we can use data to better understand the world and I am using these methods to make our lives safer, and policing more effective."

Reflection:

- What would you ask each team member to learn more about careers in social science?
- What ideas and subjects have motivated the team to pursue social science? What interests you, and why?
- How have other people and events influenced the team's career choices? Who or what influences you and your goals?
- What have you learnt about social science – and what it means to be a social scientist – from reading about the team's work and their personal experiences?
- Now that you have learnt about social science research and why it matters, how likely are you to pursue social science in the future, and why?
- If you do not think you will pursue social science directly, how do you think social science might still influence your future education or career field?

The team's top tips

Michael: Don't pick a field; pick a problem. Then be deliberately 'undisciplined' and raid every department for the tools you need: maths, coding, experiments, and wide reading in history, economics, philosophy, evolutionary biology, and more.

Remember that you inherited a world built by people no smarter than you, with fewer resources than you have now. With the internet and AI, you can learn almost anything. Use that advantage to expand your capabilities and those of others. Don't wait for permission – start small, test your ideas, share what you learn, improve a corner of the world and keep going.

Nils: In school, I thought that I needed to think about what I was good at and then find a vocation linked to my skills. Looking back at this 15 years later, I believe this is the completely wrong approach! The most important thing is to go out there and do things that you feel

motivated to do – and don't be afraid to change direction if things don't work out. As you go forward in life, things that excite you will open up along the way.

Bingchun: Read widely, stay curious, ask questions.

Eugenie: Don't try to follow anyone else's path – make your own. The world will look very different in 10 or 20 years, so the best investment is in skills that make you adaptable and in passions that keep you motivated. Work hard, experiment widely until you find something that excites you, and then stick with it. If you can combine curiosity with persistence, you'll be ready for whatever challenges and opportunities the future brings.

Tom: There is a lot of work to be done in data science and AI. Develop in that direction, and you will have a great career ahead!

Which of these tips do you find most helpful, and why?