

Nachgefragt: Interview mit Prof. Dr. Kou Murayama



Kou Murayama was an Alexander von Humboldt Research Fellow in Munich from 2010 to 2012. Before he was Professor in the School of Psychology and Clinical Language Sciences at the University of Reading. Since 2020 he has been Humboldt Professor of Educational Psychology at the Hector Research Institute of Educational Science and Psychology in Tübingen.

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Prof. Murayama, your research focuses on intrinsic motivation in education. What exactly is intrinsic motivation?

If you ask why students are motivated, there are different reasons. For example, a student may be motivated because he or she wants to be praised by the teacher or by the parents, or sometimes they just want to get good grades. This is extrinsic motivation. Intrinsic motivation is the motivation to study or learn for the sake of learning. You study because it's fun, or you learn new things because it makes you feel good.

What is your intrinsic motivation for studying intrinsic motivation?

There are two answers. The first is rooted in the Japanese education system when I was young. To get into university, you have to study really hard. When I was 17 or 18, I used to study until midnight every day, get up at seven and study again. It was terrible. My motivation was completely extrinsic because I just wanted to get into a good university. And luckily, I got into a good university and I liked it. Then I just stopped studying because there was no pressure to study. I was young and I wanted to have fun. That was my personal story. Then, by chance, I started studying educational psychology. I thought that psychology was unscientific, more like philosophy, but actually people try to understand the human mind scientifically as much as possible. I liked learning about it. And this is where my intrinsic motivation started. Within educational psychology I also came across the concept of intrinsic motivation. When I did my PhD, the topic of my thesis was not about intrinsic motivation. But I thought I would change the subject a bit, and intrinsic motivation came quite naturally to me. First of all, when I think about my life as a student, my motivation changed from extrinsic to intrinsic. From a scientific point of view, I felt that there was still a lot of work to be done. Second, as an educational psychologist, I went into schools. There I felt that even if the teachers were doing a great job of teaching, if the students were not motivated, that great teaching would never translate into a good outcome for the students. Motivation is the bottleneck of education.

What is the fascinating core of intrinsic motivation?

The most exciting thing about this field is that it's becoming more and more interdisciplinary. Historically, intrinsic motivation has been studied in the fields of educational and social psychology. But in recent years, more and more people from different fields have become interested in this concept. For example, in neuroscience, many researchers study animals, and they give them tokens or foods, and then they come up with their theory from these experiments. These theories are therefore deeply rooted in extrinsic incentives. But nowadays people in neuroscience have started to realise that that's not enough to understand human behaviour, because if you think about human behaviour, there are not many rewards in the wild. The rewards are scarce, but we still think that we are always motivated to do something. Researchers in neuroscience are now looking more and more into the area of intrinsic motivation. This is exciting. The other thing is AI and machine learning. ChatGPT, for example, is a pre-trained AI, which means that people have to give a lot of data to make it great. But think of an AI that can gather the information by itself. AI researchers are now working more and more on intrinsic motivation because it is getting more important to understand how we can create a system that can autonomously explore the environment and learn the new information without any external input from humans. This means intrinsic motivation is also a core part of AI development. I'm very excited to see how this field develops.

You work with people from different disciplines: psychologists, neuroscientists, computer scientists. They often seem to have their own language. They use the same terms, but they don't mean the same thing. So how do you experience this cross-disciplinary collaboration?

It's challenging and not easy. At the same time, you can take advantage of it to develop a career. I have a background in education research and psychology, and some knowledge of neuroscience. I also studied a lot of psychometrics and data science, which helped me learn AI and machine learning. This means that I can use different languages from different fields, which allows me to find some unique research questions which cut across different fields. This is my approach. I don't know how successful I am, but I enjoy it.

You have not only worked in or with different disciplines, but also in different countries such as Japan, the UK, Germany and the USA. How come? Why so many countries?

There were not specific reasons. It is a consequence of a sequence of random events. I never thought I would go abroad. When I got my PhD, I was a completely domestic person who did not speak English. Then I got the scholarship that allowed me to go to any university in Japan. I decided to go to Tokyo Institute of Technology to study psychometrics. But this scholarship also allowed me to go abroad for a year and a half. I just thought maybe it's time to go abroad, and I happened to choose the University of Rochester because my friend was there before. When I went there, I thought I would come back after 1.5 years and then get a job in Japan. Before I went back to Japan, my mentor asked me: Are you interested in coming to Munich? I didn't even understand the word "Munich". But I just said yes. Then I went back to my office to check the meaning, realizing that it is a city in Germany. I knew its name only in Japanese, not in English. So anyway, after I went back to Japan, I came to Munich and at

the same time I also got a fellowship from Humboldt. That also allowed me to stay longer. Almost three years in total. And even then, I thought I'd go back to Japan. But at the same time, my wife got the same fellowship from the Japan Society for the Promotion of Science that I had, and she got a position in Los Angeles, at the University of Southern California. So, I thought it'd be nice to go to Los Angeles for two years to be with my wife again. Then, after a while, we started to think about the next steps. And we started applying to Japanese universities. At the same time, my wife's mentor in the US recommended that we should also apply abroad. We were surprised because we never thought we'd be qualified, but fortunately Reading University in the UK got interested in us. We started our first teaching jobs there. We were happy in the UK – the colleagues were great, and the culture was really nice. After seven years, however, there was Brexit and we were also very frustrated by many problems in the UK politics. Then there was sort of an opportunity to come to Tübingen. After discussing it with my wife, we decided to move. That's how I came to Tübingen. In short, how come did I travel so many countries – the answer is that it was opportunistic. I like doing research. I always tried to find positions that allow me to do what I like. I think that's the only thing. A chain of coincidences and luck led me to Tübingen. But, you know, I'm very happy to have this life. It could not have been better.

You have done research in Japan, the UK, Germany and the US. What are the differences between the science systems in these countries?

In my own experience and feeling, in Japan you have to teach a lot in the field I am working on. In the US you can do fantastic research, but you have to be a superstar. And you have to present yourself very well. In the UK there are great scientists, but there is general shortage of funding. Also, in the UK, tuition fees are quite high, so we take extra care of students. In a way, that's an important thing. But at the same time, they are treated as customers, not as independent adults. This would not benefit them. As a result, our attention was too much paid to student satisfaction, such that I constantly felt distracted. In Germany, if you get the professorship, it's really nice to do research with great resources. And the students are also relatively independent, autonomous, I would say. Of course there are problems. Young researchers do not have tenure. In the UK, it's hard to do research unless you get good grants, but it's relatively easier to get a tenured position. In Germany, there are basically only temporary positions for young researchers. But if you get a professorship in Germany, it is one of the best countries to do research.

You went to Munich on a Humboldt fellowship. Now you have a Humboldt Professorship. How did you find out about them?

When we were discussing the possibility of going to Munich, my host professor at the LMU suggested that I also apply for this fellowship. So just that. Then I applied for it and got it. It was a great scheme, and I really liked it. Looking back, I should have studied German at the time. That is the only regret I had at the time. I never thought I'd come back to Germany and at the time when I was a Humboldt fellow, I wanted to concentrate on my research. When I

was wondering about the move to Germany from the UK, I didn't know about the Humboldt professorship. But luckily the university nominated me and I got it.

What are your plans for the future?

I intend to stay in Germany as long as possible for two reasons. The first is personal. My daughter really likes Germany. She came here when she was three years old. At first, she couldn't speak German, but now she is German in spirit. That means a lot to me, because family was the biggest concern when we moved to Germany. My daughter also goes to a Japanese school in Stuttgart, where she learns Japanese, which she also enjoys so far. Because of that family reason, and also because we found that Germany is a really nice place for a family to live, I intend to stay here for a long time. Another reason for staying is, of course, that the conditions for research are really good. My wife got a tenure-track professorship, meaning that we also have job security.

And in Germany the pay is good and the pension is good as a professor. This is important – as an international researcher you are often put in a situation where you need to pay more, because you do not know good tricks of how to live a life economically. Language is another issue. For example, sometimes you have to find a craftsman who speaks English, which automatically excludes us from potential cheaper options. And if you cannot not be sure, you just want to make sure that everything works by paying extra money. I do not want to talk a lot about money but as an expat it is an important aspect.

The questions were posed by Tobias Meilinger,
co-speaker of the Regional Group Tübingen, DHN