Dr. Fujiwara Greve Takako Specialty: Game Theory

Interviewer: 池田、馬場

[Advanced game theory, repetitive game and evolutionary game.]

Please tell us about what you are currently researching

I'm currently working on a repetitive game and evolutionary game. However, explaining this to you would be very difficult because this topic is very advanced. Therefore, it is not the case that my seminar directly reflects my studies. The fields covered in the seminar are basic microeconomics and non-cooperative game. The goal is to ensure that these basic parts are understood.

The education philosophy I ultimately reached was, "Let students learn difficult things independently."

Can you tell us about your education philosophy?

My education philosophy has changed throughout my career. As soon as I came back from studying at Stanford, I felt that the ability of Keio students was low. To be honest, I thought "Why can't they understand these easy topics?" and became quite irritated. At the time, I was teaching in an American fashion and teaching in a very easy way. However, this changed along the way. When the first graduate student started on their doctoral course, he eventually gave up on obtaining the degree. The reason was because of the lack of mathematical foundation. I was very disappointed at the time because he gave up on going to graduate school, and he gave up because I was not able to prepare him for it. Since then, I decided that I shouldn't teach my students simple concepts and prepare them by teaching difficult topics. I realized I have to breakdown such concepts so that students can better understand them. This is how my education philosophy has changed. Until then, I thought that students should learn simple concepts on their own. However, I changed to teach difficult concepts by guiding the students. Furthermore, after I went to Norway, I realized that Keio students are very talents, and through this realization, I realized that it would be a waste if I didn't teach such talented students. When I realized the students are talented, I made students study on their own as well. To sum it up, I had two transitions. First, I made students learn easy concepts on their own. Secondly, I taught students difficult concept under my control. Lastly, I allowed students to learn difficult concepts on their own. Recently, I have been teaching in this way. As a result, if my students decide to go to graduate school, no one will give up anymore.

A student who had a fateful encounter with microeconomics.

Can you tell us about your Student Days?

The way I spend my days in college is because of how I spent my days in high school. When I was in junior high and high school, I was on the school's volleyball team. In a sense, I was satisfied so I was vaguely thinking about studying in college. I had interest in economics, so I entered the faculty of economics without thinking about other departments. Since I played sports

up until then I decided to study different concepts in college. I was in a volleyball club, but I was also in a theoretical economics study group (a club that study the basic concepts of economics). When I entered college and studied various topics, I learned microeconomics in my second year and realized this was something I wanted to study. Since then, I have been studying microeconomics. What appealed to me was the theory was created with great precision. Until then, I had a fear that social sciences would be ambiguous and made up of philosophical discussions compared to science and mathematics. However, if you look at economics, it's as rigorous as science and mathematics concepts. Since economics can be considered a science field, it can properly verify the hypothesis using data and it can also prove theorems. I was impressed by the fact that it was such a science. If you think about it, what you do in college may be the result of what you do earlier on as a child. Contrary to me, I think there are many people who studied very seriously in junior high and high school and are exhausted when they enter college. I didn't study much before, so I put new concepts into my empty mind, which was fun.

I only look for one thing. The thought that you like theory.

What do you require from the incoming 2nd years?

Seminars on game theory are the same everywhere, but people who like logical thinking should come to my seminar. "If A then B", if you like thinking in this way, you should come to my seminar, and if you decide to join my seminar because your friend is in it or think it's useful for job hunting, I don't think it would be fun for you. In my seminar, I will ask students to explain their thought based on a reading on the spot, and I do this more than once a month. But it doesn't have to be perfect right away. Some people grow in the seminar, so if they continue to say that they like game theory that's okay. "If you like what you do, you will be good at it", so even if you got a C in microeconomics, it shouldn't be a problem. If you got a D, that would be a problem. There have been many people in my seminar who said they had a C in micro or people who had to retake micro in their 3rd year have joined my seminar before. Just show that you are motivated, and I think you will improve if you come to my seminar.

I will teach you for the entire 2 years. J

Lastly, a message to the incoming 2^{nd} years?

The purpose of my seminar is to do game theory. We are the only seminar doing non-cooperative game theory at Mita. Therefore, people who want to do non-cooperative game theory have to come to my seminar. I will promise you I will teach you carefully and individually for two years. Same as sports, it is difficult when you are not good at it. It is true that it will be difficult until you become good at it, but once you have the experience of fully understanding a concept, it will become fun. For two years, I will teach you game theory and microeconomics properly, and you will be able to write a graduation thesis using the theories you learned in my class. So if you want to go to this extent, please come to my seminar.