This is the continuation of our recent series where we talk with economists and other social scientists about their recent work and their research experience. With these interviews, we mean to explore the challenges of formulating good research questions and establishing a research agenda. Hopefully graduate students will find this series a helpful tool in their pursuit of graduation.

In this second installment, Goncalo Costa, an economics PhD student at the CUNY, Graduate Center interviews John Roemer, Elizabeth S. and A. Varick Stout Professor of Political Science and Economics at Yale University. The two discuss John Roemer’s paper “What is socialism today? Conceptions of a cooperative economy” and look back at Roemer's experience as a PhD student and a scholar.

GC: Hello, thank you for presenting in our seminar series. In this interview, we are going to try to have a short chat about your recent research but also, we will try to look back at your PhD experience and your working methods and how you organize your ideas. Can you provide a short pitch of the paper you presented us today and briefly the main message, why it is important?

JR: Well the main message is this idea that economic system is built on three pillars: a behavioral ethos, a distributive ethic and a set of property relations. You must consider all three of these things. What I argue is that pillars of socialism are different from the pillars of capitalism. Then we must try to see whether we can model that and see what the consequences will be.

The new thing I have done that is to embed a formal model of cooperative behavior in models of socialism, and that is the Kantian idea. The basic conclusion that is you get Pareto efficiency with non-capitalist property relations that you don’t get with Nash optimization, which is the model of the individualistic ethos. That is the punchline of the paper.

GC: Were you the first person to introduce this type of Kantian maximization?

JR: I was the first person to model this, yes. I thought about it in the early 1990s but I did not work on developing it then. I published a version, an example of it, in a book in 1996 called Theories of Distributive Justice. But I started working on it in an intense way around 2010.

GC: Could you tell us how you came across this idea?

JR: I play a lot with models. I was originally trained as a mathematician. I was a graduate student in mathematics. I decided quickly, within the first year of graduate school that I didn't want to spend the rest of my life doing pure mathematics. So, I transferred to economics at Berkeley in 1967, because it was a way I could use my mathematical skills and interest to do more socially and politically interesting work. I wrote a dissertation and I was a Marxist at that
time, but my dissertation had nothing to do with Socialism and Marxism, it was on international trade.

But I read some modern work of Japanese economists in the mid-1970s on making mathematical models of Marxist ideas and that really pleased me and so I started working on that. That was really the beginning of my career. Then, I was working on using mathematics to try to study classical Marxist ideas like exploitation and class formation. I did a couple of books on that and things evolved from there. It is a long story of my evolution but that is how it happened.

You said, “where did you get that idea?” Well I am always fooling around with little models. When I want to study something, I make a little model and I play around with it, to see what happens.

I wrote a paper with my colleague Joaquim Silvestre; we were on the faculty UC Davis. In socialism, it is an old idea that you should distribute the output in proportion to people’s labor. So, we asked ourselves in a general equilibrium model, is there always an allocation in which output is proportional to labor and is also Pareto efficient. Nobody had asked that before. Then we showed there is. That really gave some meat to the idea that this is a goal socialism could have. It could distribute output in proportion to labor in an efficient way.

A lot of Marxist economists were not worried about efficiency at all. They talked about fair labor value and so on, but they did not talk about efficiency. But efficiency is an extremely important concept. Then we asked, “Can you do the distributive ethic of Socialism in an efficient way?”

The answer turned out to be yes, you can. That was a discovery. We published a paper on this in the Journal of Economic Theory and I noticed that this solution had the property that it could be decentralized in what I call now multiplicative Kantian Equilibrium. I noticed the fact nobody would advocate multiplying a whole vector of labor supplies by a constant. So that was a nice equilibrium concept that I call the Kantian equilibrium. I got the idea from fooling around with simple models.

**GC:** You also cited G. A. Cohen?

**JR:** Yes, Cohen was very influential. He was a left-wing analytical philosopher. He wrote a very important book called *Karl Marx’s Theory of History: A Defense.* It is an analytical philosophical book about deconstructing historical materialism as a consistent theory with axioms, theorems, and proofs.

He was not a mathematician; it was all verbal with him. But he was a very precise, logical thinker. So that book was a revelation. That really brought Marxist studies into modern social science. After Cohen's book, people realized you can do the same thing with the theory of historical materialism as you could do with other liberal theories of justice. It was something you could talk about in a sophisticated way, using modern tools.
I was working on a book called *General Theory of Exploitation and Class*. I was asking the question if I could present a general equilibrium model. I sent Cohen chapters from this book after I read his book. He was interested in what I was doing.

**GC:** In comparison to other social sciences, it is increasingly getting harder to be published in economics journals while discussing alternative methods and ideas that somehow are not considered as mainstream. Would you agree with that? If so, do you have suggestions for young scholars?

**JR:** There is a lot of innovative work being done now in economics. I think some of mathematical economics has gone too far, become too separated from reality. But on the other hand, there has been a huge resurgence in empirical economics.

When I was in graduate schools in the ‘70s theory was much more popular than it is now. I think this move towards empirical work has very good aspects to it. People have become very sophisticated with data. This is a new development. Yes, the *American Economic Review* is very narrow. But there are places where you get be published that are less narrow.

**GC:** Can you name a few?

**JR:** I think the most important work in economics is being done by Thomas Piketty. His work is very different from standard economics. He is very historical, but he has done fabulous work and he is not having any trouble being published in good journals. Of course, he is a master of neoclassical economics. He is not doing something new without knowing, you've got to know and understand the standard rules and use them when you can.

**GC:** Briefly going back to your time as a PhD student, you mentioned you were interested in the works of Japanese economists who were translating Marxist ideas into economic models. How did you find your angle into these discussions? A lot of PhD students have this idea about which area they want to work in. They have some set of ideas of important research, but they might say that a lot of these have already been done before. They ask, “How do I start working on these ideas, how do I get a research question which is important but also doable?” Do you have any insights on this?

**JR:** There is not an easy answer. The first original research I did in economics was a theory of class formation in a market economy. How optimizing people partition themselves into five classes. That was the first model of how classes were formed endogenously in a market economy.

It was an accomplishment, but it took me years to figure out how to do that. I just played with the models. There is a statement about learning to play musical instruments on a professional level: “you have to put in 10,000 hours.” That’s how you learn to play the violin. Of course, you need to have some talent. But if you have talent it still takes you 10,000 hours. I’d say the same thing about economics. You must have some talent, and then you put in 10,000 hours using the
methods, you really enjoy, they could be theoretical methods -- in my case optimization theory. It could also be empirical methods. It could be econometrics. But you must play with the methods you like, keep working and eventually, if you really think about what you are doing and if you spend lots of time, you will come up with something interesting.

But you must have a method. Am I going to do theoretical work? Am I going to do empirical work? Am I going to be an economic historian? You must choose the method you like because you won't be able to put in 10,000 hours of work if you don’t enjoy it. Choose the method you have a comparative advantage in, and work on that area. Just keep doing examples and questions.

Think about problems that you believe are important. Think of the big questions and carve out a small issue in the area you are interested in and see if you can say something rigorous about it.

**GC:** How do you keep track of the dialectical process you are talking about? When do you say “I am getting the big picture” about the ideas you are working on?

**JR:** Okay, so I think of a problem I want to work on. My initial formulation will be too complicated. I can’t deduce anything about the answer. So, I make it simpler. You keep on making the models simpler until you can analyze it. That’s how I do theoretical work.

When you get an answer, you have a theorem. Then, you say you want to generalize something, or you say this is not realistic enough, so you start to relax some of the assumptions and see if the theorem still holds.

I am less able to give you instructions on empirical work because I don’t do it. I don’t do econometrics. I never learned it and I was always interested in theory, but I am sure the same is true for econometrics. You think of an issue, you get some data, you first try to do something you believe is interesting, it turns out you don’t get good results, you try again. You get new data; you change the problem a little bit until you get good results. Then, you start to make it more complicated. But the idea is the same. You try to make things as simple as possible until you get results you like. Then start to complexify it.

**GC:** So, you start with a big issue with a lot of layers so that you can go to the bottom of one simple issue and then you can start to re-compile.

**JR:** Yes. You saw me present a paper on Socialism today. It probably looked well developed, elegant, with beautiful theorems. How many years did it take me to get to this point? Well, I am thinking about ideas related to socialism for 40 years. Literally, 40 years. I have been working on questions about socialism, welfare economics, general equilibrium theory for 46 years. So, I put in more than 10,000 hours, I am sure. That is what it takes. There is no short-cut.

**GC:** Though today in academia there is this emphasis on productivity, where you must publish every year.
JR: Yes, you have a problem as an Assistant Professor that you’ve got to publish. You also need to have high standards for yourself. You want to work in an area you are interested in. It does take a certain amount of luck, but it also takes perspiration. Einstein said, “genius is 99% perspiration and 1% inspiration.” I think that is true. I think I’ve had four big ideas in my life. Maybe five. Each one of them has taken about 10 years to develop.

GC: From what you’ve said so far, can we say you get a lot of your inspiration for your ideas from other social sciences?

JR: Philosophy is the main one for me. I was interested in Marxism and exploitation. Definition of exploitation is labor embodied in the goods you can purchase with your earnings is less than the labor you expanded in production. Say you work 40 hours a week. You get a certain wage for that. But you can only buy goods back which embody less than 40 hours of labor. Whereas the capitalists are the opposite. They earn a lot of money and they can buy goods that embody much more labor than they expended.

So, I asked myself the question why is that ethically bad? To answer that I had to read the philosophers because philosophers were having a very interesting and productive debate about distributive justice. Then, I started modelling what they were saying. Now, I teach a course in which I present models of the ideas philosophers present. Now, I publish philosophical papers as well.

GC: You read philosophers, but how do you do it? Do you write book memos, do you underline some parts and take notes?

JR: I make models of their distributive ideas. When philosophers are talking about distribution, they will be talking about economics. You can make models of what they are saying. Sometimes, when you model what the philosophers are saying, you will find out that their claims are wrong. So, you must both be a philosopher and an economist.

GC: DSGE models have taken over macroeconomic research done today. How do you feel about these highly mathematical models?

JR: It is not the mathematics that bothers me; it is that postulates are often incorrect. All markets are clearing, that the labor market is always clearing, feel too neo-classical in a sense. The representative-consumer approach throws away the question of income distribution, which for me is probably the most important question.

GC: Thank you very much for taking the time to answer our questions today about your research and your experiences as a PhD student and a scholar.