

Learning from the right neighbour: an interview with Jack Vromen

JACK J. VROMEN (Heerlen, 1958) is professor of theoretical philosophy, with a special emphasis on the philosophy of economics, dean of the philosophy faculty at the Erasmus University Rotterdam, and director (and co-founder) of the Erasmus Institute for Philosophy and Economics (EIPE). He earned master's degrees in economics and in philosophy of economics from the University of Tilburg, and a PhD in economics from the University of Amsterdam under the supervision of Neil De Marchi.

Vromen has a particular research interest in evolutionary thinking and economic methodology. He is the author of *Economic evolution: an enquiry into the foundations of 'new institutional economics'* (1995), and (co-)editor of numerous anthologies, including *Institutions and the evolution of capitalism; implications of evolutionary economics* (1999, with John Groenewegen), *The social institutions of capitalism: evolution and design of social contracts* (2003, with Hans van Oosterhout and Pursey Heugens), and most recently *The economics of economists* (2014, with Alessandro Lanteri).

EJPE interviewed Jack Vromen about becoming a philosopher of economics, his interest in evolution and its relation to economics, and the role he has played in the formation of EIPE, a major centre for the study of philosophy of economics. In this interview Vromen explains why he believes biology is a discipline much closer to economics than many economists realize, why the concept of evolution is important for understanding economic processes and for the economic discipline, and also why evolutionary economics never became mainstream when many believed that it would.

EJPE: *You are an economist by training. How did you end up the dean of a philosophy faculty?*

JACK VROMEN: Well, I have to correct you there. I am not just an economist by training, I also did philosophy. In Tilburg University, there was the possibility of doing a double-degree program in philosophy of

EJPE's NOTE: This interview was conducted by Willem van der Deijl and Vaios Koliofotis. Van der Deijl is a PhD candidate at the Erasmus Institute for Philosophy and Economics (EIPE) and co-editor of the *Erasmus Journal for Philosophy and Economics*. Koliofotis is a PhD candidate at EIPE, specializing in evolutionary explanations of economic behaviour.

economics next to your economics degree, which I did. So, I graduated in both. In fact, it was a little bit of a coincidence that I ended up doing my PhD in economics. Back then, it was required to choose a discipline in which your thesis was to be written in, a requirement that has now been dropped. If you look at my thesis, it is a little arbitrary that it ended up being a thesis in the field of economics. I think quite a few economists who read it at the time probably thought: is this really economics? In fact, one of the committee members at my defence asked me this very question. He told me that in a decent economics thesis there should be a model and an empirical test, and in my thesis there was neither a model nor a test. I think my work fell a little bit in between economics and philosophy. I think it probably would have qualified as a thesis in philosophy.

So, you could have also ended up the dean of an economics faculty?

[Vromen laughs] That does not follow. I did my PhD with Neil De Marchi, who was professor in economics in Amsterdam at the time. In those days, Amsterdam had a strong profile in philosophy and economics, starting with Johannes J. Klant, who preceded Mark Blaug's Popperian analysis of economics with his book *The rules of the game* (1984). The group was led by Mary Morgan, Mark Blaug, and later John Davis. I was part of that group. So, I have been part of an economics faculty, but not as a dean.

Were there any particular thinkers, or texts, that influenced your early interest in philosophy and economics? When, how and why did you become interested in philosophy of economics?

Starting with the last question, I started with doing a bachelor degree in econometrics actually, not in economics. My interest started with the building blocks, just the mathematics and statistics, without any applications. In the beginning I thought it was nice, but after a number of years it became too much for me. So, I switched to economics, which, in a basic sense, was just the lighter variant of econometrics. And then I decided to switch to philosophy of economics. Because there, I thought, I could find some answers to the questions I had when studying econometrics. While it was clear that the models used in econometrics rested on a number of assumptions, there was never any debate about the truth or reliability of the assumptions, neither in econometrics nor in economics. People just used them to derive useful applications. I

thought that there *should* be a debate about the assumptions. I took a few courses in philosophy and I thought it was *there* that these questions were being addressed.

When I did my undergraduate studies, I was intrigued by Habermas. I still think that for some purposes he has very interesting ideas. Not just historically—about how to think about the enlightenment—but also about the problems of contemporary societies. But when I moved on, and developed my own research projects that were related to philosophy of economics, I thought Habermas was not the right person to draw on. I do not think he really understood economics so well. He wrote about it from quite a large distance. The same applies to science in general.

At some point, I did develop an interest in the work of people who were trying to connect Habermas's ideas to science. One of them was Shaun Hargreaves Heap. He wrote a book in which he tried to connect Habermas to economics. I thought that was not bad at all. But I still think it was too distant from the discipline. If it comes to political or moral issues, I am still inspired by Habermas, but not for my work on philosophy of economics. So, I left it behind. But I was still very glad he visited the Erasmus University in October last year. I was still impressed by him. Not just by his brightness, but also by his overview on all kinds of things.

So, you can say that your shift to philosophy was motivated by dissatisfaction with economics?

Yes, definitely. Economics simply did not answer what I took to be very fundamental questions.

Your specific research interest is evolution and economics. Your work can be divided into three parts. The first deals with industry behaviour, the second with the analysis of human behaviour in terms of evolutionary forces working on individuals and groups, and the third with types of explanation associated with evolutionary theorizing and modelling. What drew you to these topics and the theme of evolution?

I was deeply interested in the issue of realism, or *realisticness*, of assumptions. The most central paper dealing with this in economic methodology is Friedman's *The methodology of positive economics* (1953). It occurred to me that there was already a large literature about

this paper at the time (in the mid or late 1980s). Most philosophers of economics had written something about it. What I took to be a very underdeveloped theme in Friedman was the evolutionary argument. While Mark Blaug had touched upon it, most methodologists neglected it completely. But I thought it was important, also as an important feature of the argument of the paper. At first I was very sceptical about the argument. It seemed to me that Friedman had only made it up for the occasion, to support the usage of unrealistic assumptions. I thought that if I wanted to assess the argument I should have a look at evolutionary theory itself in order to have a better grasp of it. I started to read books in natural selection and evolution, such as Elliott Sober's *The nature of selection* (1984). The funny thing is that the more I read about evolutionary theory, the more I thought: Friedman's argument is not at all that stupid; there is something to be said for it.

My supervisors advised me not to go in this direction because it was such an uncommon research topic. I ignored the advice for a while. I thought it was important and believed that it could become more important in the literature as well. And I was lucky, because when I finished there was quite some interest in it. My stubbornness had paid off.

So, this explains my first research interest—evolution in industry behaviour. I also started to explore other places where evolution and economics intersected. I discovered the work of Jack Hirshleifer (1977), who argued that it was strange that evolution entered economics at the level of industry behaviour. There is a direct unexplored link that could be drawn between evolution and individuals, and individual behaviour. Furthermore, as a philosopher with an interest in philosophy of science, I stumbled upon the work of Jon Elster (e.g., 1977) and Philippe van Parijs (e.g., 1981) on functional explanation, and to what extent functional explanation should be seen as a valid type of explanation outside of biology—in the social sciences. This opened up yet another area that I thought was interesting. So, I slowly found out that there is a variety of interesting links to be drawn between evolution and economics.

You mentioned that you were originally motivated by a concern for the realism—or realisticness—of economists' assumptions. Is this still the link that connects these projects?

Maybe a little, but it has moved to the background. At the time I was interested in the work of Uskali Mäki (who I did not know at the time) and Nancy Cartwright, and her book *How the laws of physics lie* (1983). The final chapter of my thesis was about the link between realism and evolution in economics. After my PhD I kept on working on this link, but it has now moved to the background.

Do you think the link holds up? Does evolutionary thinking make economics more realistic?

Yes, I still think so, but only if we understand evolutionary thinking in a specific way. Perhaps it is not biological evolution that is directly relevant for economics, but cultural evolution and related things. Friedman, and also Nelson and Winter (1982), believed that there was something like an evolutionary process going on in economic markets. And, to some extent, I still believe that this makes sense. Consider for example the idea that we should not assume that equilibria will be reached, or that they are already reached—as a working assumption—or that you should not assume that people are perfectly rational. These ideas are covered in evolutionary economics in an interesting way.

Who is your work on the methodology of economics for? Do you write mostly for practicing economists or philosophers of science?

Good question. I always hope, and try to make an effort, to engage with practising economists. In the work of evolutionary economists a lot of philosophical issues pop up and are sometimes explicitly addressed—but sometimes in an unsophisticated way. I would not be satisfied if only fellow philosophers paid attention to my work. I also participated in organizations like EAEPE (the European Association for Evolutionary Political Economy)—an umbrella for all sorts of heterodox schools of economics. Within EAEPE there have always been people—such as Geoff Hodgson—who have been interested in philosophical issues from the point of view of an economist. Unfortunately, this is quite exceptional. A lot of mainstream economists do not pay any attention to philosophy. They simply do not have an interest in it, thinking they can do without it. For evolutionary economists this is quite different. They think philosophical issues are important for their research practice. This makes it very interesting to address them in my academic work.

I also hope my work is interesting for philosophers of science. I have always thought that philosophy of science has a tendency to be very

distant from actual scientific practice. It is generally very abstract, and does not address what practicing scientists actually think and do. I thought some improvements could be made there as well. I try to pay more attention to actual practice in economics, since this should be relevant for philosophy of science.

Evolutionary economics in the Nelson and Winter tradition experienced rapid growth and presented itself as a radical alternative to neoclassical economics. However its ideas remain in the shadow of mainstream economics. Why do you think evolutionary economics never became mainstream?

There are different stories to be told. One story is that Nelson and Winter type evolutionary economics was presented as a radical alternative to mainstream theorizing in economics, rather than an interesting addition. This was observed by William Baumol (1983), who wrote a review of Nelson and Winter's book. He wrote that it was interesting that the book was about things standard economics usually does not cover, and he believed it to be a contribution to the discipline. He did not see, though, why the authors felt the need to bash what they called 'orthodox economics'.

One problem is that both orthodox and heterodox economists did not completely feel at ease with evolutionary economics. It fell a little in between those camps. At the same time, I did meet a lot of economists in the 1990s who were very interested in evolutionary economics. Another contributing factor may be that this type of evolutionary theorizing in economics employed types of modelling that were not really *en vogue* with economists at the time, such as simulation modelling. Later on this became more commonly accepted in economics. In short, there are many different reasons, and it is still not very clear why evolutionary economics never really caught on.

The scarcity of empirical work, and the lack of an overarching theoretical framework, could those be reasons?

Yes, perhaps. Your latter suggestion goes in the direction of Geoff Hodgson and Thorbjørn Knudsen's (2010) attempt to formulate a theory of generalized Darwinism.

This might be an aspect, but I am not sure whether it is the full story, or even the main reason. I do not think it was so unclear what Nelson and Winter were arguing with regard to the general role of

evolution in economics. At the same time, if it comes to the issue of attracting a critical mass of support among academic economists, Hodgson and Knudsen's attempt also fails. They present a generalized framework, but while there are many who find it interesting, these are mostly people who thought it was already there before their book came out.

What might also be relevant is that evolutionary economics was superseded by evolutionary game theory, which started to enter economics around roughly the same time—the late 1980s. Evolutionary game theory did really catch on. There were conferences and seminars in which the two were presented as alternative ways to make evolution relevant to economics. There was a clear preference for evolutionary game theory because it was much closer to the frame of mind of economists. So we can speak of a competition between the two research projects, and evolutionary game theory clearly won.

So, there are a lot of different reasons. One is the ambivalent attitude of evolutionary economists towards mainstream economics. Is that something that you already saw at the time, or is it something you see now, looking back?

I already observed it in my thesis. You could see that different people responded very differently to Nelson and Winter's book. There is a review by Philip Mirowski, who is very critical of standard economic theory, who criticized the book for not being radical enough. It was too close to standard economics.

If you look at the work of Richard Nelson, such as his work on innovation systems, it is very close to mainstream economics. In fact, this was already discussed explicitly in the book. They make a distinction between appreciative theorizing and formal theorizing. Formal theorizing comes in the form of equilibrium analysis and related practices. But appreciative theorizing is informal—sometimes in discussions that economists have or in working papers. It was the appreciative theorizing that Nelson and Winter wanted to formalize. This is closely related to work by Friedman, Alchian, and Machlup, who were all mainstream economists.

So, even in the book there was an ambivalence. Sometimes Nelson and Winter are very critical of the standard assumptions mainstream economists make, such as perfect rationality and the achievement of equilibrium—presenting themselves as radical reformers. At other

times, they argue that the gist of their theory is already present in the appreciative theorizing of standard economics, and that they just aim to formalize this.

Evolutionary economics has not converged in terms of theory. In a 2004 paper you noted that different authors have suggested a variety of ontological views, and that there is no ontological common ground in evolutionary economics—which seems to mean that they cannot agree on what they are talking about. Have things improved since the publication of your paper? Can the investigation of the foundations of evolutionary economics improve research in this field?

As an answer to your first question: I failed miserably. It is indeed true that there was a debate about ontological issues in evolutionary economics. But, if you looked closely, they did not seem to agree on what ontology was supposed to be about.

There was a debate that came to be quite big within evolutionary economics. On one side there was the Hodgson camp, who argued that they presented *the* ontology for generalized Darwinism. On the other side, there were people such as Ulrich Witt, who argued for a different ontology based on continuity in evolutionary processes. The idea of continuity is that biological evolution produced intelligent creatures like us who can act deliberately but still have some remnants of the past in us, like tastes, preferences, etc. But the very fact that we are able to act deliberately shows, for Witt, that all these analogies to biological evolution are simply wrong: you cannot put human behaviour in a Darwinian framework of variation and selection.

What I noted is that both camps are really talking at cross-purposes. They are interested in different things. Hodgson, for instance, does not at all deny that there is such continuity. He even has a similar thesis in his book. What Hodgson has in mind are abstract principles. If you understand them in a very general way, they apply across the board, not only in biology but also in different systems. But this is not what Witt means when he uses the term ontology. In the article, I tried to show this. I analysed the different positions and different usages of the term ontology and see which positions are compatible and which ones are not. I tried to render them a service, but... mostly in vain.

Recent empirical work on human behaviour has challenged the self-interest assumption of mainstream microeconomics while retaining

the rationality assumption. Can such experiments take us towards a unified theory of human behaviour incorporating insight from biology, economics, and psychology?

I think it can in principle. But, it depends on what is meant by unified theory. It can mean that different theories are brought together in one framework. Herbert Gintis is known for doing this for the behavioural sciences (e.g., 2009). Another way of understanding unified theory is that it is a theory that many people working within the area of research accept. And the latter is something quite different. For example, Gintis thinks he can stick to a version of revealed-preference theory, but this is quite contested. Most behavioural economists want to get rid of this theory.

What you could have are different proposals for unified theories, but I do not see it happening sometime soon that there will be one that many people will accept.

There is also a large debate about whether rational choice theory and evolutionary theory amount to the same thing at some level of description. You could call this an attempt at unification as well, but of a very different type than Gintis's. There may be other sorts of attempts to arrive at a unified theory, but, given my experience, I am a little sceptical that one will succeed.

The exchange of ideas and concepts between economics and biology is an important feature of your work. What is interesting for you in such an exchange between these two fields? What do you think economics can gain?

A lot of methodologists of economics believe that economists try to imitate physicists. This started already with Adam Smith, who greatly admired Isaac Newton and wanted to be the Isaac Newton of economics. Philip Mirowski calls this 'physics envy'. Not only do economists imitate and emulate modelling techniques from physics, they even literally adopt exact equations from physics.

When I started to work on biology and evolutionary biology in particular, I started to think that the connection between economics and biology is much more natural, and much tighter, than the connection between economics and physics. I do not only mean that economists could learn more from biology, but also that economics and biology are very similar in the way the disciplines themselves evolved. To give an anecdote: we once invited Paul Krugman to an EAEPE conference with

the specific question, “What can economists learn from biology?” He took a very serious look at biology and said: “What can economists learn from biology...? They are almost the same!”

The two disciplines are very similar indeed. Looking at certain modelling techniques in evolutionary biology, very similar questions arise about whether the processes converge to equilibrium or not. It looks very similar to economics. In a sense, economics has always been a ‘population science’. As the debate about industry behaviour in Nelson and Winter illustrates, economics is mostly about aggregate behaviour rather than individual behaviour, just like biology. The similarities are so clear that Krugman concluded: economics *is* a biological science.

So, economics should have less physics envy and more biology envy?

I would not say it should be envious. But it is interesting to see that Darwin was inspired by Malthus. And the root notions of scarce resources and competition, which are, I think, the basis of the Darwinian idea of natural selection, can be found in Malthus’s work. In many different respects there are really close similarities between biology and economics that should be acknowledged.

In 1996 you founded the Erasmus Institute for Philosophy and Economics (EIPE) together with Uskali Mäki and Albert Jolink. Next year, EIPE will celebrate its 20th anniversary. How do you look back on this?

I am very glad to have been part of it. The fact we started it is a little bit of a coincidence. At the time, there was a concentration of talents. Uskali Mäki, a strong figure in the debate about the realism of assumptions in economics, had just joined the philosophy department at Erasmus, and Arjo Klammer, who had been working on the rhetoric of economics with Deirdre McCloskey, had been hired by another faculty. At the time, these were the two hottest debates in the methodology of economics. So we were very fortunate to have these two scholars around. And there were more. Albert Jolink is a historian of economics who had written his thesis on Walras. Maarten Jansen is a game theorist trained in economics, econometrics, and philosophy, who was working as a methodologist of economics. John Groenewegen, an institutional economist, was also there, and so was Deirdre McCloskey—due to her close cooperation with Arjo Klammer—and later Mark Blaug. All these people were in the same place, and we thought it would be a waste not

to do something with this. We applied for some university subsidy and that is how we started. A large conference was organized around the inaugural lecture of Uskali Mäki. Nancy Cartwright, Mary Morgan, Kevin Hoover, Bruce Caldwell, Wade Hands and others all came, and that is when we launched EIPE.

There have been a lot of changes over the years. At first, EIPE was dominated by big names with strong views: Uskali Mäki, Deirdre McCloskey, and Mark Blaug. This has changed now. Also, EIPE is now less narrowly focused on methodology of economics. In general, philosophy of economics was, at the time, mostly about methodology; ethics had a much smaller part. So, there have been some interesting changes.

Would you say that these influential thinkers—including also Roger Backhouse and Julian Reiss—have left their mark on EIPE?

I think many people still associate EIPE with Uskali Mäki, Deirdre McCloskey, and Mark Blaug. Especially among those who have been in the field for a while. With Roger Backhouse it is a little different. He was only active at EIPE for a short while, before he started to write the biography of Paul Samuelson. Julian Reiss, though, has definitely left his mark on EIPE.

What do you think about the role of EIPE in the philosophy of economics community?

There are two well established journals in the philosophy of economics: the *Journal of Economic Methodology* (JEM) and *Economics and Philosophy*. The main competitor of EIPE as an institute is the philosophy and economics group at the London School of Economics and Political Science (LSE). The group at the LSE is mostly focused on decision theory, rational choice theory, game theory, social choice theory, etc. For that reason they have always had a close connection with *Economics and Philosophy*. EIPE, on the other hand, has always been associated with JEM.

At EIPE we had Blaug, who was a Popperian, and Klammer and McCloskey, who argued Popper should not be applied to economics. And Mäki's research interest lay with realism in economics. These are all central topics in the methodology of economics. Furthermore, EIPE has also been associated with sympathy for non-orthodox school of thought in economics, due to the work of John Groenewegen, as well as my own.

But this, I think, is now largely gone. At the time, there was a natural alliance between methodology of economics and criticism of mainstream economics. Most people considered it to be two sides of the same coin: if you went into methodology of economics, of course you were critical of mainstream economics.

So there is a strong connection between EIPE and methodology of economics, but would you also say that there is a substantive position, something like an 'EIPE school'?

Uskali Mäki's realism has been seen as the dominant approach at EIPE. Julian Reiss has somewhat different views, and that may have changed the image of EIPE as a realism centre. Although the differences may be smaller than some take them to be—I think Reiss also has some realist leanings.

Looking at the future, do you have a vision about EIPE in 20 years?

It will be flourishing, of course!

On a more serious note, the whole field of philosophy and economics has changed. There is a lot more ethics, which started with the work of Ingrid Robeyns. A lot of students are attracted to that. There is more formal work, related to decision theory and game theory, etc.—much more so than when we started. I could easily see that EIPE will be organized around a more diversified idea. There would be different areas that we try to cover with different people, much less focused only on methodology of economics.

I also think that there are nice opportunities to forge links again with the economists at Erasmus University, for example to work on the measurement of happiness, well-being, capabilities, and prosperity. Closer links can also be made with the behavioural economists, who are also prominent at Erasmus. So, there are all kinds of opportunities to connect more closely with economists.

One of your published papers (Vromen 2009), the subject of your inaugural lecture and a later symposium which became a special issue of JEM, was about the 'economics made fun' genre. Could you explain how you came to be interested in this topic, and how it relates to your other interests? Should popular literature be an important part of philosophy and economics?

The more general message of the inaugural lecture was that philosophers should try harder to understand what economists are doing and why they are doing it, rather than criticizing them from a distance. In this respect there is something interesting about the economics-made-fun genre. There are all kinds of jokes that economists make about their discipline.

I also showed a short clip of the stand-up economist Yoram Bauman, which I still think is very funny (see Vromen 2009, 74, n.5). The nice thing about him is that he is, to some extent, ridiculing parts of what economists do or think, but he does so with a thorough understanding of what they are saying and why they are doing it—without the condescending attitude that philosophers often have. This attitude—that economists must be crazy—is something I really dislike within philosophy of economics.

The economics-made-fun genre is interesting. If you just look at the name, you might think it is all about being funny. In some sense, though, the opposite is true. It is deadly serious. Often, authors writing in this genre argue that economics has a lot of interesting and worthwhile things to say about almost anything, and people had better pay attention to it. What struck me is that there was an interesting tension related to this project's timing. At this time, you could already see the financial crisis emerging. The popular image of economics was that it was not worth anything. No economists saw the crisis coming. They were all surprised—at least, that was the popular image. At the same time, Steven Levitt [the most popular economics-made-fun author] was telling the world that economists should be taken much more seriously than is commonly done, not only when it comes to standard economics topics, but also all sorts of other issues that are not typically part of the economics profession. This tension fascinated me.

It is interesting from a sociological point of view as well: why are economists doing this? How do fellow economists respond? It was interesting that Steven Levitt is a Chicago economist, and there were economists at Chicago who thought the economics-made-fun genre would attract exactly the wrong type of students. So, there was interesting debate within economics about this as well. This all made it very interesting.

In light of the economic crisis, some economists have argued for more reflective courses in the curriculum and more space for philosophy

and history. Do you believe the influence of philosophy on the practice of economics has increased?

This is hard to tell. There might be a little bit more openness. I think economists have become a little bit more self-critical. They have started to deal with philosophical issues. But what is striking is that they often do not turn to philosophers to address these issues. While I have argued that the term does not exactly apply, it is some sort of ‘economics imperialism’. Itzhak Gilboa gave a talk at the last INEM conference [in Rotterdam, 2013], where he was dealing with the question “how do models relate to the world?”. This is, of course, a key issue in the methodology of economics. When I saw an earlier version of his paper, I told him: “there are philosophers who are dealing with this issue as well”, and his reaction was: “oh, really?”.

Economists are dealing with philosophical issues themselves, but often do not know of the existence of our field, which I think is quite worrying. So, to answer your question, I think there is more interest among economists for philosophical issues, but this does not necessarily mean that philosophers of economics have a large say in economics. I think they should, but that is a battle still to be won. But, the first thing is that we should really engage with economists interested in these issues, and show them that we are around. Sometimes we only discuss these issues among ourselves, without reaching out. I think we should reach out more often.

Could you tell us something about how philosophers of economics should do that? Your own work, for example, often seems motivated by the conceptual sloppiness of debates in economics.

I would not like to say that this is the only way. But, indeed, what you often see with practicing economists is that they are typically very precise when it comes to mathematical or technical issues, but very sloppy indeed when it comes to conceptual issues. They simply do not care about this. And what often happens is that one economist means one thing with a term, while another means something else. Sometimes they do not even notice the difference. I really think they should pay more attention to these things. But, of course, this need not be the only way in which philosophers could enlighten economists.

There are two issues at stake. The first is what role philosophers could play in philosophy of economics, and the second is what role philosophers could play in economics. Philosophers can play both roles

of course, but they are different. What I always rejected is the idea that philosophy of economics is applied philosophy—if applied philosophy means that you have general ideas in philosophy that can simply be applied to economics. I think that is completely the wrong way to go. One of the good things of the past decades is that within philosophy of science there has been a growing awareness about the peculiarities of different disciplines. Economics is really very different from sociology and other disciplines. I think it is really quite important for philosophers of economics to understand the economics that they are talking about. This often means that general ideas that philosophers have developed cannot simply be transferred to economics. You have to develop your own philosophical ideas to fit with practice in economics. The role of general philosophy in philosophy of economics should therefore be limited.

If it comes to the role of philosophy in economics, it is important not to have a condescending attitude. In my own work I try to avoid that. I certainly do not want to suggest that we should not take economists seriously because they are so conceptually sloppy. If you notice conceptual sloppiness you should also try to find out why this is the case, as I do in my work. Why do they not pay more attention to conceptual issues? Is it really fatal for their enterprise? Does it have disadvantages for what they want to accomplish? It is important to try to place yourself in the shoes of economists before you criticize them. So I think there is a role for philosophers of economics in economics, but hopefully without the attitude that we should teach them how to do economics.

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