STS Careers Podcast – Prof. Brian Balmer talks to former BSc History and Philosophy of Science student, and current Associate Professor at KAIST in South Korea, Grant Fisher.

Grant Fisher graduated from the BSc History and Philosophy of Science course in 1998, before completing his masters and PhD at the University of Leeds. He has taught at Durham, Leeds and Bogazici University in Istanbul, before joining KAIST in 2010. Here, he speaks to Prof. Brian Balmer about his time in the department, and his work since.

BB So today I'm talking to Grant Fisher. Grant, you were in the department in its early days really, 1995-98 – or I should say in the early days of the degree. Do you want to tell us what you studied, and some of your early memories of the department?

GF Sure – well I studied History and Philosophy of Science, although when I first started I hadn't decided which stream I wanted to take…

BB …Just to say that in those days we had three streams, didn't we? We had History and Philosophy of Science, History Philosophy and Social Studies of Science, and Science Communication and Policy. Those were the three that we offered…

GF That's right. I think having a broad coverage of classes right that the beginning of the degree was very good for me, as it gave me an opportunity to study Sociology of Science Policy, and I now work in a policy department, so all of that has been extremely useful! My memories of the time are very good because it was an extremely cohesive group of undergraduates who came in that year…

BB ..and you were only the third cohort of students that we taught, so we were still in Guinea Pig mode, still experimenting on what worked and what didn't. We still do, change the syllabus and things like that, but at that point is was a completely new type of degree. Do you want to say a bit more about what you remember?

GF Even though you say we were guinea pigs in a sense, it seemed very well organised. The classes were extremely engaging and challenging. I remember there was a very strong desire amongst us as students to really engage with all of the work as best as we could. We were from quite a diverse set of backgrounds. Some were straight from university – In my case I came from a non-traditional path into university. I'd been working before…

BB Tell us a bit more about that.

GF So basically I did quite a lot. I came to UCL when I was 27, I'm now 50. At that time I'd been a volunteer coordinator, I'd been a lab assistant in the environmental protection agency, a musician, a salesman, various things…and I realised that I wasn't really going to, sort of, progress in terms of my career and life choices unless I got a degree. I didn't really realise what I wanted to do until I found a book in the library by Karl Popper called 'The Logic of Scientific Discovery', and I thought 'That's what I want to do!'. I did actually write to a few institutions, including UCL, but none were as positive as the Department of Science and Technology Studies. So I found it a very welcoming environment, a very nurturing environment, and I was encouraged in fact by you – I remember you were my undergraduate advisor – and at the end of the first year you gave me some very good advice…

BB I've forgotten what it is

GF I remember you said - and I was very surprised to hear this frankly, I hadn't expected this – but you encouraged me to think about graduate study at the end of the first year, and I thought 'Wow, I must be doing ok if Brian is asking me about these sorts of things, or

encouraging me to think about these sorts of things'. It was, for me, a very positive experience, I have very fond memories of being a student here.

BB I don't know if you've visited the website recently, I know you've been looking round the department. What's changed?

GF Well, lots of things have changed, I think, in terms of the physical space. Things have been upgraded, repainted. You have a studio here now which you didn't have when I was an undergraduate!

BB It was just a piece of attic!

GF Right. Also there's been many new additions in terms of staff, so that's something that I think is very exciting, because you have a very wide range of expertise here. There was already when I first came here…

BB …although if we're going back to the 1990s there were probably about 5 of us, I think, teaching, and now there are 16 or 17 members of staff*, so there's definitely been growth in the department and we feel like a grown up department now.

GF Yes, definitely.

BB So you eventually decided at the end of your first year to specialise in History and Philosophy of Science, and obviously Karl Popper had got you into that. Tell us about the rest of your journey as an undergraduate to becoming – not a historian, but a philosopher of science.

GF It was a difficult decision, and in fact, this is where Hasok Chang, who's now at Cambridge, really encouraged me to consider both history of science and philosophy of science very seriously, but also I remember that you were very encouraging in terms of getting me to think about sociology of science as well, and I remember taking your upper level class in sociology of science which was extremely beneficial to me, and I'm so glad I did that. But you can't do everything! Although I have to say I am about to give my first paper at the 4S conference in Sydney, so I am branching out!

BB Just for those listening to the podcast, 4S is the biggest conference of the year for sociologists of science. It stands for the Society for Social Studies of Science.

GF Yes, so that's a first for me. I'm still very much interested in that area as well. The decision really came down to thinking about what kind of research I enjoyed doing the most. Was I more of an archival kind of researcher, or was I someone who was more interested in thinking slightly more a general abstract level about philosophical issues concerning scientific method. Back then I was getting very interested in modelling and chemistry, something again that we talked about. I remember about things like Buckminsterfullerene, and with Arthur I Miller, who was a professor here back when I was an undergraduate as well. It wasn't an easy decision. Even though I work in philosophy of science I still consider myself someone very much interested in history and sociology of science, and that's partly because of the very broad education that I got here. I've never been someone who's comfortable in strictly the analytic philosophy tradition…

BB Do you want to quickly explain that for the people who are listening?

GF So that's the kind of Anglo-American tradition, which is very much focussed on considering philosophical problems in terms of the analysis of concepts, rather than thinking about practice so much…

BB …and what scientists actually do…

GF Exactly – and not to be too unfair to the analytic philosophers, because of course that's extremely important to what I do, but I'm very much a ground-up person, so I like to look at what's actually being written about the scientists, and what the scientists are writing about what they do, rather than come up with something first and then try to get everything to fit it. I wouldn't say it's empirical, but it's very much based on practice. I got that really from studying here as a student, and particularly with Hasok (Chang).

BB So what was your dissertation on?

GF My undergraduate dissertation was called 'Are ad-hoc hypotheses useful tools for discovery?' or something like that, which looked at how amendments to scientific theories which don't necessarily generate new predictions – or if they do, they seem a bit tacked on, not really consistent with the other propositions or aspects of a theory that the theory might already contain – how they might, nonetheless, promote interesting developments in scientific practice. I was developing an approach that drew on the ideas of Paul Feyerabend, for example, who's a philosopher of science who advocated a kind of anarchistic approach to science…

BB Anything goes!

GF Anything goes was his catchphrase , exactly. And I still teach Feyerabend in KAIST, much to the infuriation and the excitement of many of the students. I think he captured my imagination a lot when I was a student here. So the dissertation was very much about exploring the laws of fringe aspects of scientific method. I didn't really pursue that into my graduate study, but it's still there. I was very much interested in scientific discovery when I was a student here. I wouldn't say I was so much concerned with that now, because to me the idea of scientific discovery is something that's far more complex than just discovering something that was, as it were, in nature. There's a far greater… a number of ideas now that people understand, and I think I pursue this more through investigating model construction, and also things like controversy in science – I'm quite interested in dissent and controversies, and error and mistakes. So the ad-hoc stuff that I was interested in as an undergraduate...

BB …comes back to visit you

GF It does come back to visit me, yes!

BB So, after the degree, what were the next steps?

GF So as I was getting towards the end of the degree, I had already been encouraged by you, and then Hasok was very keen to get me thinking about where to go next – because I was encouraged not to stay here, but to go somewhere else, to try to get different ideas as a graduate student. So I ended up going to the University of Leeds to do my masters in History and Philosophy of Science there. Very different environment, much bigger department, and I really did miss the kind of intimacy – which I think you still have here! Although you were saying earlier that you'd expanded in terms of staff, it still feels like a very friendly…

BB We care about our students!

GF Yes, I've met some of Chiara Ambrosio's graduate students, and you can tell that they enjoy being here. So I was a little bit reticent about leaving, I have to say, and I did think about staying in London. But I went to Leeds, and they were really nice to me. The first person I met was Jonathan Haunch…

BB …and he was a historian of Biology?

GF Exactly. We had lunch and he was really encouraging – what he said about what they did and what they were looking for from the students, I thought 'I seem to be a good fit'. Then I met Steven French, who was a philosopher of Science, philosopher of Physics, who became my supervisor for my dissertation. Which took me in a completely different direction!

BB And then on to your PhD, which was at Leeds?

GF So I stayed at Leeds to do my PhD. I did think about coming back to London, but I stayed at Leeds as Steven was a very good supervisor, and so I thought I'd best stay there.

BB And then life after the PhD?

GF After the PhD I did some teaching for a while, I taught at Durham university with David Knight, the historian of chemistry, who sadly passed away recently. I taught classes on Science and Religion, two cultures (in terms of the 19th century), and history of science, and did some teaching at Leeds too. Then I was looking for a post-doc, which brought me back to STS.

BB So you spent a year…?

GF It was actually 3 and a half years!

BB Back at STS – so we attract people back like a magnetic field. Then on to your career?

GF No, first I went to Turkey, which was unexpected. How it happened was… it was a difficult time, this was coming up to the financial crisis of 2008. Two things – I was having a bit of trouble finding a good position in the UK, but also I was quite curious about working overseas anyway. I had met a Turkish philosopher of science at several conferences, and she emailed Hasok and I about this opportunity at the Bosphorus university in Istanbul, and I thought 'why not take it?'. It wasn't a philosophy of science position, but they were looking for someone who could teach philosophy AND science, and I seemed to fit the bill somehow. Basically I was working on a new liberal arts programme along with colleagues working in classics, english literature and the history of art. Basically we co-taught those classes, a great books class from Plato to Nato. I remember teaching ancient astronomy as well as philosophy and everything else including Shakespeare and Kafka. That was good. After two years that came to an end, and then I heard about an opportunity in Korea. I thought to myself that I was already travelling east and maybe I should just keep going! I did, and that's where I am now.

BB And so what are you doing now?

GF So I'm an associate professor in the graduate school of science and technology policy. I still do research in philosophy of science, but I tend to do more exploratory stuff, policy related work. Very much interested in, as well as classic debates in philosophy of science and philosophy of chemistry, I'm also interested in the ethics of governance of emerging technologies. Currently working with my students for 4S on the idea of disruptive innovation in the fourth industrial revolution. So I have very broad interests and, depending on where you go and who you meet, your interests grow and adapt to new things. But I still come back to thinking about what I learnt at STS!

BB So, going back to what you learned at STS, all that time ago, if you had to sum up for, say a sixth-former, why you should come and do science and technology studies – what is it about it that kept you in the field and kept you studying?

GF It helps you to really engage with something that's so fundamental to every aspect of our lives. It's inescapable really, whether in business or education or some other profession, the impact of science and technology on our lives. I suppose it's almost trivial to say that. But to study it brings out the capacity in students to think out of the box, because you're encouraged to think differently about something that you've almost accepted without questioning its social, philosophical, historical, let's say anthropological basis. That produces students that are really capable at adapting, and also have a wide range of transferrable skills. Studying STS helps you to understand where you are in the world, and where the world is going in a very fundamental way.

BB And the last question, having worked, as you say, increasingly eastwards – what advice would you give to overseas students about applying here, or applying to British universities in general?

GF I do actually speak to a lot of students about this in Korea, and I think the opportunities to study abroad should be taken if they're available to you. Simply because you'll get a different access to expertise. Every academic has their own interests, and teaching styles vary greatly between different countries. In Korea, the educational system is quite different to the one in the UK. I think coming to a different country to study is an extremely valuable experience. Although I've not done that myself I think there's some similarities with working overseas, because you really gain some insight into what it's like to be part of another culture , which would be very useful to students in terms of learning about the discipline that they're interested in. I would encourage that. I think that, in some countries, there's a tendency to want to stay where you are, but there's an awful lot to be gained in terms of moving around and experiencing new things. If you like travelling I suppose that's one thing, but this may give you the taste for learning about how different countries do things, in terms of education and in terms of professional life as well.

BB Grant Fisher, thank you very much.

GF My pleasure.

*note – Brian isn't quite correct. As of the start of 2018 we will have 20 members of full time teaching staff!

For more information on the department and its work, visit the STS website at www.ucl.ac.uk/sts

For information on our courses, and how to apply, visit https://www.ucl.ac.uk/sts/theres-nothing-quite-sts