

PHILOSOPHY AS A SCIENTIFIC DISCIPLINE

AN INTERVIEW WITH TIMOTHY WILLIAMSON

Ned Block has claimed that phenomenal consciousness and cognitive access can come apart, such that one can have a phenomenal experience of something without having the kind of access to this experience that would allow one to report on it. He bases his argument to a large extent on an interpretation of Sperling's study of iconic memory. I highlight two claims that Block makes concerning this study, and argue that both claims are problematic and insufficiently supported by the empirical evidence.

By Hans Robin Solberg & Max Johannes Kippersund

What do you think it takes for something to be a science? And do you think philosophy is one?

It's not a very precise question. Just look at the range of the sciences. When people hear the word "science", they typically think of the natural sciences: physics, chemistry, biology, and so on. But there are the social sciences as well, which I'm happy to include as sciences because I don't have an exclusive conception of science. For me, having done my undergraduate degree in mathematics and philosophy, mathematics is a very salient example of a science. There's something wrong with any conception of science that excludes mathematics. I don't stop there. For example, history, when pursued in a scholarly way, deserves to be in that company. We are really just talking about any kind of systematic inquiry. In that sense, the claim that philosophy is a science is not very demanding, although there are still people who reject the idea because they don't

think philosophy is a form of systematic inquiry in the same sense as all those other subjects.

So the main reason why you think philosophy is a science has to do with this systematicity of the inquiry?

Yes, it's not just a casually looking things up on Wikipedia sort of inquiry, or looking out of the window, writing down a few things you see. There is a serious attempt to control for accuracy, to have long-term strategies, to correct errors and so on. But when I talk about a form of inquiry, I do mean something whose aim is fundamentally to acquire knowledge. The claim that philosophy aims to acquire knowledge is not totally uncontroversial.

On this understanding, would you say that philosophy is on equal footing with the branches of what is traditionally called natural science?

Would one say that mathematics is on an equal footing? It's a very different kind of inquiry from natural science, but it also deserves the name of science. In thinking about whether philosophy is a science, it's important not to have too restrictive a model of what science is, and in particular not to fall into the idea that in order to be a science one has to resemble the natural sciences as much as possible. Because although they are a magnificent achievement, and of course there are very significant differences within the natural sciences, that just isn't the only way of being scientific. In particular, doing experiments isn't required for being scientific. But it would not be completely wrong to say that although philosophy is a very old science, it is still a very immature one.

But still, you would say that there are similarities in certain practices?

Yes, that's right. Beyond the bare fact of being in this relatively loose sense a science, there are quite significant analogies, particularly between the most theoretical forms of inquiry within the natural sciences and philosophy. For example, physicists themselves make a distinction between theoretical physics and experimental physics, a distinction that has quite a few repercussions in the sociology and intellectual structure of the discipline. Philosophy is obviously much more similar to theoretical physics than to experimental physics.

One thing you have focused on in your work is the use of models in both sciences and philosophy. Could you say something more about what you mean by "model" and also how philosophers are doing model building and how it compares to scientific model building?

When I talk about models, I use the term in a fairly specific sense. In both natural science and the philosophy of science, the word "model" has often been used in a very loose way on which virtually everything turns out to be a model, which is quite unhelpful. I mean it in the much more specific sense in which a research team in biology will sometimes advertise for a model builder. That is a specific job: Not all the members of the research team are model builders, but often they need to have a model builder or two. A model is basically a hypothetical example of the phenomenon one is interested in. It is typically described in precise mathematical terms, so that one can calculate lots of features of

the model. The model is typically not intended to be realistic. Everyone knows from the start that reality is not the same as the model, but nevertheless there may be enough similarities between the model and what one is interested in for studying the model to be a good indirect strategy for studying the aspect of reality one is primarily interested in. The reason science does a lot of model building is that most science is concerned with phenomena so complex they can't be usefully described in terms of exceptionless laws. That is not to say that there are no exceptionless laws in nature, but they are typically at a very fundamental level, too distant from the macroscopic phenomena one is interested in. For example, I recently had a very revealing conversation with a professor of evolutionary biology who also has some interest in philosophy, who said that one reason biologists in his area find it difficult to engage with what some philosophers of biology say is that they conceive biology as a search for laws. Whereas the biologists regard that as a hopeless way of proceeding because complex biological phenomena are so messy, the only exceptionless biological laws they might obey would be relatively trivial. Biologists take it for granted now that the way to understand such phenomena is by building models that capture more and more of what is going on in them. Even in physics, one is often dealing with model building in that sense, which may involve idealizations, like treating planets as point-masses, considering only one planet, and so on.

Model building has turned out to be an extremely successful research strategy in the natural sciences. In philosophy too, we often study complex phenomena. That's most obvious in branches of philosophy somehow concerned with the human world. For example, take epistemology. In principle, we are not just concerned with human knowers. Although epistemologists want a theory that necessarily applies to all knowledge whoever the knower is, what they study most in practice is human knowledge. Humans are obviously one of the most complex phenomena we encounter. Kant's remark 'Of the crooked timber of humanity no straight thing was ever made' also applies at the level of theories about human phenomena. It is very likely in advance that epistemology will need the model building strategy. When you look, you find it in fact being employed. I'm not counting the usual examples epistemologists use. I'm thinking of formal epistemology, which divides into two main branches (although they can be

combined): the Bayesian tradition of probabilistic models and the epistemic logic tradition of models of a different kind. Both work in pretty much the same way as models in natural science. The same is true in philosophy of language, where we are mainly concerned with human language. Much of its energy is now devoted to studying the semantics of natural languages. Although it hasn't usually been thought of this way, what we are doing is in effect building better and better models of fragments of natural language. Moral philosophy and political philosophy also deal with complex human relations, so we should expect the same thing there. When you think of applications of decision theory and game theory, you realise that to some extent model building is going on there too.

I'm not at all suggesting that model building is the only kind of worthwhile activity. Not all members of the research team are model builders, but some are. Without prejudice to other forms of

theoretical activity, model building is an important form which hasn't properly been recognised for what it is in philosophy. That's one reason why

That's one reason why philosophers have the impression that less progress is made in philosophy than actually is. They are applying an out-dated conception of scientific progress to philosophy

philosophers have the impression that less progress is made in philosophy than actually is. They are applying an out-dated conception of scientific progress to philosophy. They think of scientific progress as consisting in the discovery of more and more exceptionless laws; when they look at philosophy they don't see much of that activity, maybe a little in logic but not much elsewhere, so they conclude that we are not making progress. But in fact that model of progress is wrong for the sciences because, as I mentioned in the case of biology, very often progress in natural science takes the form of building better and better models. When you look at philosophy from that perspective you realise that in fact we are making progress in the same way. There is a tendency amongst philosophers, in looking at philosophy, to be unduly pessimistic, because they compare real philosophy with ideal science. Of course, philosophy comes badly out of that comparison, but so does real natural science.

You said that models involve a degree of idealization. But the aim of these inquiries seems to be knowledge of truths about the world. How does the idealization that goes into the model

give us, or at least help us achieve, this knowledge about the world itself?

Models can be used in more than one way. People think of models as making quantitative predictions, which of course is one use of them in natural science, and in philosophy we don't do much of that. But that is an over-restrictive view of models, even as used in the natural sciences. Models of the semantics of natural language are compared with data about what speakers say and even about which sentences are true in which situations, and so on. It's a model-building activity, done in very similar ways in philosophy of language and in formal semantics as a branch of linguistics. Many uses of models are much less data-driven than that. For example, biologists ask why are there just two sexes in so many species, not three or six sexes. By the nature of the problem, there aren't lots of three-sex species to go out and do experiments on. One way to approach the question is to build models of hypothetical species that reproduce through three sexes. If you see what happens in models like that, under various different rules about how mating would work, that can give insight into why the two-sex model is ubiquitous. It's not a matter of quantitative prediction in a serious sense. (Well, if you like, two sexes rather than three, but philosophers work on such numbers too — why two truth-values rather than three?) When you consider the full range of uses of models in natural science, you see types of model-building investigation that are much better analogues of the kind of model-building we do in philosophy than just making quantitative predictions and measuring how close reality comes to them.

Some people who have claimed that philosophy is practiced continuously with the natural sciences have called themselves naturalists. Your view of philosophy might sound like a form of naturalism to some, but you have objected to this and claimed that the term naturalism is not very useful and maybe even damaging to the discussion about the relationship between science and philosophy. Why do you think that?

The term "naturalism" is used in a way that obscures the distinction between science and natural science. There is a tendency in English to use the term "science" as if it applied only to natural science. That is a very inappropriate model for philosophy. For much philosophical activity mathematics, which is basically an armchair activity,



Illustrasjon: Åsne Dorthea Grøgaard

is a much better analogue than natural science. It is often unclear how much is being built into the term “naturalism”. It can be used in a very anodyne sense: The idea is just that all subjects form some kind of very loose unity where not much is required except that philosophy isn’t utterly exceptional and transcendental with respect to all the other subjects. In that very loose sense I probably do count as a naturalist. But the term “naturalism” is also used to justify criticism of any philosophy that doesn’t engage in detail with experimental science. That’s often as short-sighted criticism as criticising mathematics for not engaging with experimental science. Admittedly, there is no clear dividing line between philosophy and natural science; for example, what philosophers and physicists do is continuous with what the most theoretical physicists do: some people can move relatively easily between a department of philosophy and a department of physics. Similarly, the philosophy of biology overlaps the most theoretical parts of biology. But that happens at the interface with all sorts of subjects: Some areas of philosophical logic are continuous with pure mathematics, some areas of philosophy of religion are continuous with theology, and so on. I am an anti-exceptionalist about philosophy; in a long view, philosophy is one more science amongst many. But to try to understand that specifically in terms of some privilege for natural science over all other forms of inquiry is a very narrow-minded approach, which distorts philosophical activity quite badly.

Many people who proclaim themselves naturalists don’t really take much interest in what is actually going on in natural sciences; they might idealize science less if they looked more closely. One of the leading naturalistic philosophers in the twentieth century was Quine, who talked a lot about how our theories in philosophy should be based on our best overall theories, by which he pretty much meant fundamental physics, but there is very little curiosity in his work about what fundamental physics actually says. Another problem with the use of the word “naturalism”, connected with this privileging of the natural sciences over all other sciences, is that proclaiming oneself a naturalist is a way of smuggling in quite naïve empiricist premises, which don’t withstand much scrutiny, epistemological or psychological.

I am an anti-exceptionalist about philosophy; in a long view, philosophy is one more science amongst many

Naturalism is of course often used normatively, to exclude certain forms of philosophy as not proper philosophy. But there are philosophers, at least in name, who do not work in a way that on your characterization would be called scientific, and some of these philosophers claim explicitly that philosophy is not a science in its own right. In light of this, is there a normative dimension to your claims about philosophy, as towards how philosophy should be done and not just how it is done?

I am very happy to make normative claims about better or worse ways of doing philosophy. Of course, there is a difference between someone’s theory of philosophy and their practice of philosophy. People whose theory of philosophy I disagree with don’t always philosophize in a way that really accords with their own theory of philosophy. But, typically, people’s practice of philosophy is influenced by their theory of philosophy. For example, some followers of Wittgenstein hold that philosophy should aim at understanding rather than knowledge, so they don’t present themselves as advancing claims that could be questioned on theoretical grounds. It’s a false dichotomy because understanding is a kind of knowledge; if you don’t know why something happened, you don’t understand why it happened. So, there is a misconception at the level of the theory of philosophy. Those hostile to systematic theorizing in philosophy often say that we should be clarifying concepts or removing confusions or liberating people from presuppositions. But all those activities involve assumptions that can be theoretically questioned. In trying to clarify a concept, people often say things like “By those words you must mean either A or B” when, in fact, those are not the only two alternatives. When they try to diagnose confusions in what other philosophers have said, there is a proto-theoretical aspect to what they are doing; they charge those philosophers with specific errors. It is often a contentious claim that what those other philosophers are assuming (and it is often contentious even whether they are assuming it at all) is a genuine error or a theoretical insight. Because the anti-theoreticians have that view of philosophy, they can’t admit that there is any kind of theory behind their own critiques. That’s what gives their philosophical activity its distinctively dogmatic flavour. If they were to admit that they are themselves making assumptions which need to be evaluated and compared with rival assumptions, a theoretical activity, they would be contravening their own account of

philosophy. So they have to treat what are in fact the contentious theoretical assumptions they rely on as just obvious truths or conceptual truths that no clear-headed person who understands what's at issue could reject. They don't just have a mistaken theory of philosophy; it has a damaging effect on their first-order practice of philosophy.

When you say that there is this continuous relationship between the sciences and philosophy, I still take it that you think that philosophy is a branch of science because it has its own distinguishing features, its own set of rule: That is, it is an autonomous branch. What do you think are the most important dissimilarities between the natural sciences and philosophy, for example in practice, or maybe aims?

Just about everything we do in philosophy – at a reasonably general level of description – is sometimes done in other subjects too. But there are things we do much more of. An obvious example is thought experiments. Of course, they occur in other subjects too, but the use of very elaborate and often somewhat fantastical scenarios is much more marked in philosophy than elsewhere, even though, as everyone knows, Galileo and Einstein did some thought experiments. But thought experiments just don't have as salient a role in other subjects as they do have in contemporary analytic philosophy. It is also characteristic of philosophy to be, in a very loose sense, an armchair discipline. But in saying that, I'm not suggesting that there is anything illegitimate about philosophers engaging in some kind of experimental activity, as with the X-phi movement of experimental philosophy. Clearly, in lots of areas philosophy has to take account of experimental results. For example, the philosophy of space and time can't ignore what special relativity has to say about those matters. It would be silly to deny that special relativity has some authority through its connection with experiment. I don't mean that it is easy to see just what special relativity implies for philosophical theories of space and time, but it can't be ignored. Again, it would be crazy to pursue lots of inquiries into the philosophy of perception with no interest in the experimental psychology of perception. Philosophers in those areas do in fact take account of experiments. A characteristic of twentieth century philosophy was that it rarely initiated its own programs of experimentation. There is nothing wrong, in principle, with philosophers realising that were certain experiments to be carried out the results might well cast light on something they're interested in, and

then initiating the experiments. But, experimentation requires very distinctive skills, which few philosophers have. As X-phi has developed, it has emerged that it's better for philosophers to collaborate with experimental psychologists if they are going to do experiments, because the psychologists have the practical know-how required for avoiding all sorts of confounds, which even very smart philosophers lack the experience to anticipate. There may well be more of that in the future, but it's neither likely nor desirable for philosophy ever to become a mainly experimental discipline. The way philosophers are not equipped to do experiments is not so different from the way theoretical physicists are not equipped to do experiments; it is not their thing.

So, one view that one could take as a philosopher is that one can use experimental results, and let that influence and shape one's theoretical activity, as would be the case with for example results in experimental physics: they would shape physical theory. But with the view of natural sciences, philosophy, and more generally other sciences as being in the same boat, working in the same domain trying to get knowledge..

Neurath's boat.

Exactly! Does this support looking for new relations between claims made across the disciplines? It seems like there could be theoretical assumptions that are in conflict between philosophy and other branches of science. Do you think this is underexplored? To give an example, in metaphysics, most people working on modality, which you have worked on a lot, have made a very strong distinction between physical or nomic possibility and necessity on the one hand and metaphysical possibility and necessity on the other. And some philosophers have been saying that since they are working with metaphysical modality they don't have to look too carefully at modal claims in science, to the extent that there are modal claims in science. Does your view tear down that distinction, or make it unclear whether one can make that distinction?

What I've said is consistent with the idea that some scientific laws are nomically necessary but not metaphysically necessary. In my view, there is a range of kinds of objective possibility, in a sense analogous to that of "objective probability"; metaphysical possibility is the most general kind of objective possibility. Most sciences tend to be concerned with more restricted kinds of objective

possibility, though I don't exclude the possibility, raised by Kripke in *Naming and Necessity* and pursued by Alexander Bird and others, that some things usually thought of as just nomically necessary are in fact metaphysically necessary. The idea that you can isolate all these kinds of objective modality from each other is wrong. What's nomically possible is also metaphysically possible. The idea of metaphysical possibility has been made to look more problematic than it really is because it has been treated as completely *sui generis*, isolated from what happens in natural science, to which our only epistemic access to it is, people say, "philosophical intuition" or whatever. If metaphysical possibility and metaphysical necessity are presented like that, they look like dodgy philosophers' postulates that don't really engage with anything else and might just turn out to be a complete scam. Whereas if one thinks of metaphysical possibility as the most general kind of objective possibility, which one can learn about through scientific inquiries because they provide information about types of objective possibility in the same ballpark as this more general kind of objective possibility, then it looks much less weird. It isn't accessible only through folk methods or some strange kind of philosophical insight. It can be investigated in ways that are scientific by any reasonable standards.

But it's not crucial to philosophy as a discipline that we all fit one mould; it may be crucial that we don't

So at least it makes what metaphysicians can draw on a wider domain. Not only can you use intuition, whatever that is, you can also try to find evidence in science for modal claims.

Yes, so we have a much wider evidence base for studying it, which makes its study a much more serious activity than people have thought.

But still, do you think philosophers have been attentive enough, looking towards science, to such evidence? Or have they missed certain aspects of scientific activity because they have thought of it in the wrong way?

Metaphysicians have tended to think of science as more or less amodal, not investigating modal questions. In some recent work I've argued that if you take the mathematical equations that scientists use to formulate their theories, or models, the in-

tended interpretations are often modal. Scientists generalize over all possible states of a physical system. "Possible" there doesn't mean metaphysically possible, but some kind of objective possibility, which is a species of metaphysical possibility. Metaphysicians have missed the extent to which there is an objective modal dimension to the very questions many natural scientists ask.

You commented earlier that you didn't think there was anything that philosophers uniquely engaged in; there is nothing in philosophy that happens nowhere else in science. But do you think that there are any characteristics or features that unify philosophy into a more or less distinct branch?

We are a highly theoretical discipline. Although what we do has formal aspects, discursive forms of argument, in more or less natural language, still play a larger role in philosophy than in any other theoretical discipline. To some extent, what we do is unified by willingness to engage in argument at an extremely general theoretical level, yet conducted in natural language. If you hear someone talking like that, very often they turn out to be a philosopher. But it's not crucial to philosophy as a discipline that we all fit one mould; it may be crucial that we don't. In any other science, a great variety of activity goes. Not all biologists are alike; not all physicists are alike. There is the massive division between theoreticians and experimentalists, but there are lots of other kinds of variation. It's fine for philosophy to include a wide variety of activity, indeed healthy.

If you are trained as a philosopher, you acquire a specific skill set. Of course, you will get somewhat different skill sets depending on where you are trained. But the variation is limited, at least within so-called analytic philosophy. Those questions better answered on the basis of that skill set than on the basis of any available alternative can be counted philosophical questions. Obviously, many questions are best answered by a combination of skill sets that people with different backgrounds would have to supply. A reasonable division of intellectual labour is that people work at what their skills make them the best, or at least better than most, at working on.



Illustrasjon: Øystein Eiksund