Against the Realism Debate

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Abstract

The realism debate continues in contemporary philosophy of science, with realists and anti-realists attempting to outdo each other in constructing ever more elaborate attacks and defenses of their respective positions. But the entire debate is predicated on foundationalist premises which we should abandon altogether. The result is neither realism nor anti-realism, but a common sense ontological attitude and the explicit denial that philosophers have anything interesting to say about the existence of electrons.

1 The issue

Realists and anti-realists are battling each other as fiercely as they have ever done. Faced with the success of Van Fraasen's constructive empiricism and the continuing threat of the pessimistic meta-induction, realists have adopted strategies as complex as Psillos's *divide et impera*-move and as technical as structural realism. As far as the natural sciences are concerned, the dividing line between the two parties seems to have stabilised around the distinction between observable entities and unobservable entities. This is version of the realism/anti-realism dichotomy we will adopt in this article.

The issue, then, is the following. Some of the entities in our universe are observable, and some are unobservable. We can gain knowledge about the observable entities by looking, listening, tasting, and so forth; whereas we can gain knowledge about the unobservable entities only by theorising, inference, and other indirect methods[1]. The question is: can we gain reliable knowledge about these unobservables, even though we can only see, hear and smell observables? Should we believe what our scientific theories have to say about unobservable entities?

The anti-realist says no. According to her, the epistemological gap between the observable world and the unobservable world cannot be bridged. She may have different arguments for this thesis – pessimistic meta-induction, radical underdetermination, views about the aims of science – but the thesis is always the same: we cannot get from reliable knowledge about what can be observed to reliable knowledge about what cannot be observed.

The realist, on the other hand, says yes. According to her, the epistemological gap between the observable and the unobservable world can be bridged –

[1]The divide between direct and indirect methods postulated here, if assumed to have epistemological significance, is an example of the kind of bad foundationalist assumption we should abandon. But we can let it stand in this exposition.

by inference to the best explanation, most often. This can be shown by the *no miracles* argument, or by historical analysis, or whatever other argument she devises.

The realism debate shows no sign of coming to a conclusion. In such cases, the best strategy is to look at what both parties agree on. Perhaps those assumptions are wrong.

2 The assumption

What *do* the realist and the anti-realist agree on? They both believe that there is an epistemological gap between the observable and the unobservable; and they both believe that philosophy is the discipline that is competent to find out whether this gap can be bridged or not. They both believe, then, that there is something problematic about electrons, and that is in the end the philosopher, not just the physicist, who should find out whether electrons do or do not exist.

The philosophers are alone in this. Physicists do not believe that there is a problem with electrons, but they do believe that if there were a problem, arguments for or against the existence of electrons should be physical arguments. Why do realist and anti-realist philosophers believe they are right to differ with the physicists – surely the experts on electrons?

Because they believe they are on the philosopher's home ground: epistemology. They believe they have discovered that the distinction between observable and unobservable (which is common sense enough) has a deep epistemological importance (which is not common sense at all). But does it?

Why do we believe in tables? Because we can see them? Not quite. When we see an oasis in the desert where our maps tell us there shouldn't be one, we may conclude that it is probably a *fata morgana*, and we disbelieve what we see. Seeing does not quite equal believing. We believe in tables because believing in tables helps us make sense of the world and our lives. We believe that some apparent oases do not in fact exist because that helps us make sense of the world and our lives. We believe that the external world exists because that helps us make sense of the world and our lives. We believe that a tree that falls when nobody is around still makes noise because that helps us make sense of the world and our lives. We believe that Napoleon lost the Battle of Waterloo because that helps us make sense of the world and our lives.

And we believe in electrons because that helps us make sense of the world and our lives.

Of course our knowledge about tables is more certain then our knowledge about electrons; we are more confident about tables than about electrons. But we are more certain about the existence of (unobseravble) electrons than about the existence of (observable) life on other planets. And most of us do not believe in the existence of angels, although some claim to have observed them (whereas nobody claims to have observed electrons). Certainty and observability do not match closely.

Whether or not something has been *observed* is certainly relevant, among many other relevant factors, when we develop an epistemic attitude towards that entity. But whether or not the entity in question is *observable* – well, I doubt that ever really plays a role in anyone's attitude until realist and anti-realist philosophers raise their voice and proclaim that there is an Epistemological

Gap here. That epistemological gap does not exist in common sense.

3 The solution

The solution to the realism debate is simply to deny the existence of an epistemological gap between the observable and the unobservable. It is a philosophical fiction which has nothing to do with the way we actually adopt our beliefs and disbeliefs. What it appears to be is a late version of verificationist foundationalism – the idea that all knowledge can be founded on an unproblematic basis of pure sense impressions. We have abandoned that, and we should abandon its new incarnation. This new incarnation has dropped the philosophically problematic sense impressions in favour of the less problematic observable entities, but this has also deprived it of any evident epistemological significance. Unlike sense impressions, observable entities are not inherently certain.

So, let's drop the entire realism debate. Philosophers do not have anything interesting to say about the existence of electrons – only physicists do. I guess that electrons exist, but if you want to know how certain that is, ask a physicist who is knowledgable in the field. Philosophers may have something interesting to say about the existence of Platonic ideas or objective moral laws, or whatever falls within their professed area of competence – but always through local arguments, not through the sweeping claims of foundationlist epistemology.

Foundationalism is dead. May its soul rest in peace.