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MINIMAL REALISM

This paper offers an argument against the view that science cannot tell us anything about the real world. It is useful at the very start to clarify the target philosophical position. It consists of three interlocking issues. First comes the inherent inadequacy of the correspondence theory of truth, which is an essential constituent of realism. Realists explain the difference between true judgements and false ones by appealing to an extra-linguistic reality. This is problematic because we cannot hold up our representations alongside the world to assess their adequacy to it. There does not seem to be any means of grasping reality other than through linguistic representation. This leads to the second argument, namely that scientific explanation is necessarily bound within some conceptual framework. From here the third step is usually to consider science as one particular universe of discourse among many others. We do not have the right to say that one universe of discourse gets nearer to the truth than others. Moreover, history seems to teach us that the scientific language-game changes with time. What used to be considered truly existing, like phlogiston, may eventually come to be considered a non-referring term, a fiction. This three dimensional anti-realist position as regards science is usually taken to be the outcome of the philosophy of the later Wittgenstein, and some authors quote him at length to show explicitly how his insights support this type of refutation of scientific realism.¹

The argument in this paper against this view has three steps. First of all we have to analyse briefly whether this reading of Wittgenstein is in fact justifiable. The least we will be entitled to say is that such a use of Wittgenstein is onesided. The second step will consist in discussing a possible objection coming from Thomas Kuhn's philosophy of science. After the rejection of this objection,

¹ See for example D. Bloor, *Wittgenstein: A Social Theory of Knowledge*, Macmillan (1983).

the final step will be a generalisation of the whole argument so as to arrive at the justification of a minimal version of realism.

The use of the later Wittgenstein in support of antirealism usually makes use of his emphasis on the primary role of language-games. Some accordingly insist that it is a mistake to look for an explanation of what happens ‘outside language’ as it were. It is a mistake to look for an explanation of what is described by language. What we ought to do is to look at what happens as a ‘proto-phenomenon’. In other words, we ought to be content with saying: this language-game is played. (PI § 654) Wittgenstein says explicitly that we should ‘look on the language-game as the primary thing.’ (PI § 656) Antirealists may also allude to his insight that that which makes us decide that something is true or false cannot itself be true or false. The rules governing our language-game, constituting our grammar, are antecedent to truth. It does not make sense to argue whether our tradition, that supplies the criteria for us to say that particular scientific claims are true, is itself true or false. It does not make sense precisely because we normally do not feel entitled to judge about truth and falsity from a supra-scientific point of view.²

But this is only one particular reading of Wittgenstein. On what grounds should we chose one reading rather than another? In general, one may suggest that the correct reading of an author is one which maximises the consistency of his ideas. In the case of Wittgenstein, this is notoriously difficult, given his style of writing. I would like to suggest that another way of judging the merits of different readings is to assess the author’s area of attention. It is true that Wittgenstein seems to attend most of the time to the *workings* of grammar, but in some places he clearly indicates that language-games are not completely arbitrary. He mentions for example that language-games are obviously ‘conditioned by certain facts’ (OC § 617) and the fact that he mentions this is significant even though he adds that what he wants to concentrate on is the meaning of this. He mentions in one of his manuscripts that ‘the technique of the use of a word gives us an idea of *very* general

² The relevant works are Wittgenstein, Ludwig, *Tractatus Logico-Philosophicus*, trans. C.K. Ogden, Routledge and Kegan Paul (1922); *Philosophical Investigations*, Blackwell (1953); *On Certainty*, trans. D. Paul and G.E.M. Anscombe, Blackwell, (1979). For interesting links between passages in the *Philosophical Investigations* and other writings of Wittgenstein, a useful reference is Hallett, G., *A companion to Wittgenstein's "Philosophical Investigations"*, Cornell University Press (1977).

truths about the world in which it is used.’³ It seems therefore that there is an aspect of his work which was not directly the object of his attention but which may still be very relevant to us. My suggestion is that, for my purposes here, we may legitimately attempt to draw from Wittgenstein’s philosophy some useful conclusions concerning the conditions of possibility of a language-game.

An example from the *Philosophical Investigations* may be helpful to illustrate the point. In § 142 we have:

‘The procedure of putting a lump of cheese on a balance and fixing the price by the turn of the scale would lose its point if it frequently happened for such lumps to suddenly grow or shrink for no obvious reason.’

Here Wittgenstein desires to make the point that a certain degree of normality or regularity is always presupposed in the use of a word. Things break down if the rule becomes the exception and the exception the rule. In the practice of weighing and in the language-game we associate with it, we are admittedly dealing with something arbitrary as far as the units of measurement and the apparatus used are concerned. However, there is an essential necessary condition behind both the practice and the language we associate with it, namely the fact that our world is such that objects do not change their weight unexpectedly and for no reason. It is at this point that I would like to identify a certain type of realism. It is here, at the level of the conditions of possibility of practice and language-game, that we are capable of coming up with some general truths about the external world, or to use the usual realist vocabulary, some facts about the mind-independent reality.

Having sketched my approach to the problem, we can now move to the second section of this paper. It involves the analysis of a possible objection that comes from recent work in philosophy of science. It could be observed that the example under consideration involves what scientists call, or used to call, the law of conservation of mass. What Wittgenstein was suggesting by his example corresponds to what scientists present in the form of a law, supposedly describing one of the fundamental characteristics of the world. Now it is undeniable that this law has suffered a lot of changes. In fact, even the very concept of mass has undergone considerable refinements since antiquity. And because of recent developments, as is well known, we do not speak anymore of the

³ MS 166, 12ff, text in English, see G.H. von Wright, *Wittgenstein*, Blackwell (1982).

conservation of mass but of the conservation of mass-energy. What used to be considered strictly unchanging has been shown to be changeable after all. We start therefore appreciating the force of the objection. Scientific theories are dependent on a world view, as Thomas Kuhn has insistently argued. A scientific revolution involves a change of world view, or even — as those who take the complete antirealist plunge may suggest — a change in the world, *tout court*. If history teaches us that a scientific world view may be here today and gone tomorrow, there is nothing that can justify a realist interpretation of the law of conservation of mass. It is therefore wrong to try to extract a fact about the real world from the Wittgensteinian example of the practice of weighing.

This objection however does not make the required distinction between everyday practice and scientific practice. This is where we can pin-point its weakness. It is true that nowadays we do not consider the law of conservation of mass as obtaining. But this is the case only as far as high-energy physics is concerned. In everyday life it still obtains. The disappearance of our language-game of weighing will come about if the law of conservation of mass does not hold *in our everyday practice*. And, as we know, this is not the case. In other words, everyday violation would certainly make the language-game impossible, but high-energy violation does not. So the question is: in what way does the precondition inscribed in this language-game tell us something about the real world? It tells us the following. It tells us that the world is such that, *for everyday practice*, the law of conservation of mass holds. And this is something that relativity physics not only does not refute, but also seeks to be in accordance with — to save face, as it were. In spite of the Kuhnian insistence on the uncertainty within any ontological claims regarding theoretical entities in science, the language-game of weighing tells us something which all future scientific theories will consider a constraint.

Let us try to generalise the conclusions drawn from this example involving weighing. This will constitute the third and final step in my paper.

Up to now I have argued that there is an essential necessary condition behind both the practice of weighing and the corresponding language-game, namely the fact that our world is such

that objects do not change their weight unexpectedly and for no reason. The conditions of possibility of practice and language-game will enable us to identify a certain type of realism. Consider another example. In tennis we cannot have a rule saying that no player is allowed to hit the ball in such a way that it remains suspended in mid-air. Why? Because such a rule does not make sense in the type of world we live in — precisely because of the constraints of the real world. So I am not claiming that Wittgenstein was wrong when we said that grammar is antecedent to truth. I am not disagreeing with the claim that the grammar which gives rise to our ordinary language is created by moves which we ourselves make. In fact, it is very valuable to realise that the impersonal treatment in the *Tractatus* should be replaced by a certain degree of anthropocentrism as we find in the *Philosophical Investigations*. Philosophy of language depends on philosophy of action. That is fine. But our action — and this is the crucial point — is dependent on the constraints imposed on us by the world.

To what extent are we entitled to have knowledge of these constraints? This question needs special attention. Two points will be mentioned briefly in this respect.

First of all, the objection concerning paradigm shifts and scientific revolutions must be taken seriously. If we hold that theories change and therefore the ontological status of theoretical entities changes accordingly as well, then we also have to admit that nothing can reassure us that any given language-game is established eternally. For all we know, a future scientific discovery may render some of our most cherished language-games completely outmoded. Again this may seem to undermine any attempt on our part to extract from their constraints some facts about the world. The worry is only superficial, however. We concede that any given language-game may be substituted by another. The question is the following. How are we to explain (i) why we need to change one language-game into another; and (ii) on what criteria we choose the new one? The only plausible explanation I can see that does not render the rules of grammar completely capricious is this: some specific language-games are responsible to reality in the sense that if the world were

different, certain features of them would no longer be useful.⁴ It may worry us to realise that any given fact about the world we extract from a language-game, like the conservation of mass in everyday practice, may turn out to be wrong. But this does not undermine my using the term realism in this context. My position portrayed so far is realist to the extent that it works with the following three presuppositions: that there is a world independent of our conceiving it; that we are capable of coming to know something about it; and that there is always the possibility of error.⁵

The second point concerns a possible challenge launched in this context by relativists. They may object that my position is pretentious because it suggests that something must be common to all possible conceptual frameworks. In my claim there is an unacceptable dose of conceptual colonialism. They may say: isn't it always possible to meet other beings who might think and reason in accordance with thought-constraints completely different from our own? The simple answer is no. To see why the answer is no we have only to think of what is involved in this imaginary encounter with such beings.⁶ We are presupposing two steps. First we make the judgement that they are capable of thinking or reasoning. Then we conclude that their thinking and reasoning is completely different from our own. But here the inherent problem comes to light. At the first step, how can we identify a process and call it thinking if it is completely different from our own? For thinking to be recognised as thinking at all, it must have some common element with *our* thinking. The constraints we have on thinking partly define what counts as thinking. So in the end we have to admit that it is not possible to meet beings who think in a way completely different from us. It is therefore permissible to look for the elements which are common to all types of thinking, common to all conceptual frameworks.

⁴ For a deeper study into the relationship between necessity and usefulness in Wittgenstein see Baker, G.P., Hacker P.M.S., *Wittgenstein: Rules, Grammar and Necessity. An analytical Commentary on the Philosophical Investigations, volume 2*, Blackwell, (1985), p. 330.

⁵ My approach is examined by Lars Hertzberg in relation to the problem of scepticism. See his 'On the Factual Dependence of the Language-Game', *Acta Philosophica Fennica* 28 (1976), pp. 126-153. Reprinted in Canfield, John, (ed.) *Knowing, Naming, Certainty and Idealism. (The Philosophy of Wittgenstein, Volume 8)* Garland Publishing Company, (1986), pp. 290-317.

⁶ This line of argument is similar D. Davidson's in his 'On the very idea of Conceptual Scheme', *Proceedings and Addresses of the American Philosophical Association* 57 (1974), pp. 5-20. Reprinted in *Inquiries into Truth and Interpretation*, Clarendon (1984).

Let us recapitulate the line of argument. First of all we recalled that Wittgenstein's philosophy is sometimes taken to support an antirealist position. It is nevertheless important to draw our attention to some important aspects of his thought concerning the conditions of possibility of a language-game. An example was considered involving the practice of weighing. Against this, it can be argued that all laws of physics can in no way be considered a-temporal. However we cannot neglect the fact that everyday practice involves constraints which must be accounted for by all subsequent physical theories. The constraints within a language-game are thus quite significant. They may not be the justification of any particular form of representation. They are significant however in the sense of being the foundation of our representations. Grammar may be considered to be dependent on action, but action is to a certain degree limited by the type of beings we are and by the type of world we live in. It is in this sense that at least a minimal form of realism can be vindicated.

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