

BOOK REVIEWS

Truth and Objectivity. BY BRIAN ELLIS. (Oxford: Basil Blackwell, 1990. Pp. viii + 314. Price £35.00.)

Truth. BY PAUL HORWICH. (Oxford: Basil Blackwell, 1990. Pp. x + 136. Price £27.00 h/b, £8.95 p/b.)

In the past, scientific realists usually took some form of correspondence theory of truth to be best suited, even essential, for scientific realism. Presumably, this was because they took true scientific theories to be ones which yield a correct representation of the way things stand in the world independent of theory. A relation of correspondence between words and things was thought able to sustain the idea of a representation by a theory of an objective reality.

These two books reflect an increasingly common tendency among scientific realists to throw this choice of truth theory into question. Ellis develops a pragmatic theory of truth, according to which truth is 'what is right epistemically to believe'. Horwich defends a deflationary account of truth, similar to the redundancy theory, which he calls 'minimalism'. Both authors attempt to reconcile their preferred truth theory with the stance of scientific realism.

Their handling of these themes differs markedly in scope and style of presentation. Ellis's goal in *Truth and Objectivity* is nothing less than a comprehensive account of scientific realism, which integrates truth theory with a physicalist ontology and a naturalistic epistemology. He covers an impressive range of subordinate topics, including the nature of mental states and of physical things, underdetermination of theory by data and the problem of induction, epistemic values, conditionals and modality. By contrast, Horwich's *Truth* is a short book with the precise aim of elaborating minimalism about truth. After an initial sketch of the theory, Horwich organizes the discussion around a list of thirty-nine questions and problems which arise for such an account of truth. Among other matters, Horwich considers the explanatory function of truth, its role in logic, its relation with realism, and truth-conditional accounts of meaning (which he rejects in favour of a use theory). He adheres throughout to a deflationary strategy, arguing that minimalism explains the facts about truth, and that various problems thought to involve truth are not really about truth at all.

Ellis's initial concern in *Truth and Objectivity* is to develop an ontology for scientific realism. He employs an argument from the best explanation for the reality of theoretical entities: 'if the world behaves as if entities of the kinds postulated by science exist, then the best explanation of this fact is that they really do exist' (p. 53). Ellis restricts application of this argument to entities involved in causal processes purported to underlie the phenomena to be explained; no ontological commitment is incurred by ideal entities, such as perfect gases. The criterion of causal involvement yields a physicalist ontology containing categories

of physical entities (for example, particles) and properties (for example, mass), and assorted kinds of physical events and relations; it excludes abstract particulars such as propositions and sets.

Truth and Objectivity opens with the thought that 'The theory of reality (i.e. our ontology) should permit the entities we need for our truth theory' (p. 1). The correspondence theory fares badly on Ellis's ontology. Tarski's theory of truth led to an unsuccessful programme of semantic analysis, which aimed to show how all truths are expressible in a language whose terms refer to real things. The programme has difficulty providing a realist semantics for laws, theories, modals and conditionals without postulating possible worlds, whose existence is denied by physicalism. Also, there is the question of what kind of things bear the relation of truth to reality. It cannot be propositions, since there are none, or utterances, since the same utterance can mean different things and hence vary in truth value. Nor can linguistic entities, such as sentences, be truth bearers, since their truth depends on what they are understood to mean. Ellis suggests that the truth bearers must be beliefs, which he takes to be brain states. So, if truth is correspondence, then presumably it must be a mapping relation between brain states and the world. But Ellis rejects this too, since any such mapping lacks intrinsic epistemic value, and truth, necessarily, has such value.

For Ellis, to appraise a belief as true is to give an epistemic evaluation of it, since the concept of truth is an evaluative one. Ellis sets the concept within an epistemological context, since 'to know what truth and falsity are, we must understand the system of epistemic values with respect to which our judgments of truth and falsity are made' (p. 242). He develops a 'naturalistic values-based epistemology', according to which 'rationality depends on a complex system of natural epistemic values' (p. 219); the values are natural because they have a 'biological basis' (p. 273). The system includes basic values such as empirical support, consistency, epistemic conservatism and corroboration; other values, such as simplicity, are in some way derivative. These values are served by our various inductive practices, and, since rationality is 'the pursuit of epistemic value by appropriate means' (p. 236), such practices are rationally justified.

The truth, Ellis says, 'is what is ultimately right for anyone to believe, given this system of values' (p. 11); it 'is what would maximize epistemic value, given total evidence' (p. 11). Ellis describes this as a pragmatist conception of truth, as well as a naturalistic one. The question is: is it a realist theory of truth?

Scientific realists are typically realists in the sense of holding that there is a mind-independent reality. But it is unclear that an epistemic account of truth can sustain realism in this sense. Take the sentence 'There are electrons'. It is true if, and only if, there are electrons. But if truth is what is right to believe, then there are electrons if, and only if, it is right to believe there are electrons. Yet for realists the existence of electrons in no way depends on whether the belief that there are electrons is one that it is right for us to hold.

Ellis is not incognizant of this problem: 'the theory of truth and the epistemology at which I have arrived will seem to many philosophers to be basically anti-realist' (p. 262). However, what he says to meet the problem is not altogether convincing. According to Ellis, the naturalistic epistemic value system licenses an inference

from the best explanation to a physicalist ontology and, thereby, to a mind-independent reality. So the epistemic naturalist ought to be a realist.

But *can* the epistemic truth-theorist be a realist? Ellis's response involves distinguishing questions of truth from ones of reality. He says the question whether belief in entities of some kind is true is an epistemic one: 'it is a question of what it is right to believe' (p. 291). The question whether they exist in reality is the question of why it is right to believe in them; 'it is a question of what explains the judgment, i.e. what makes it right to believe, that these entities exist' (p. 291). Thus, if the mind-independent existence of entities of some kind is what explains why it is right to believe in their existence, then the mind-independent existence of such entities is consistent with it being right to believe in them.

The trouble with this is that it can always be asked whether belief in the reality of an entity is true. Consider the 'epistemic' question whether the belief that there are electrons is true. Let us suppose that it is epistemically right to believe in electrons, so that this belief is true. The 'ontological' question now arises why it is right to believe in electrons. If what explains this is that electrons are a natural kind which exists as part of mind-independent reality, then it may be asked whether this explanation is itself true. Let us suppose that the belief that electrons exist as part of mind-independent reality satisfies all relevant epistemic values. It is, therefore, true in Ellis's sense. The resulting identification of the truth of the ontological belief with satisfaction of epistemic values falls short of realism, however. For belief in the mind-independent existence of electrons might satisfy all relevant epistemic values even though electrons do not exist. Thus, by identifying truth with rightness of belief, Ellis collapses what is real into what is right to believe, and thereby loses sight of mind-independence.

Problems of this sort do not seem to arise for Horwich's minimalist theory of truth. Truth, for Horwich, is a notion which has 'a certain purity' (p. 12). Its content is exhausted by the equivalence schema: 'The proposition *that p* is true if and only if *p*' (p. 36). Minimalism involves nothing beyond 'what is expressed by uncontroversial instances of the equivalence schema' (pp. 6–7); its aim is 'a maximally deflationary theory of truth' without 'extraneous content' (p. 12). Unlike Ellis's evaluative notion, minimalist truth has no intrinsic epistemic content. Nor does it have intrinsic semantic content, since it is not defined in terms of semantic concepts such as reference. The one superfluous element is apparent commitment to propositions, but Horwich downplays this with formulations for alternative truth-bearers.

According to Horwich, the truth predicate 'exists solely for the sake of a certain logical need' (p. 2): namely, to enable 'the indirect expression of attitudes towards unarticulated propositions' (p. 37). For example, it permits one to agree with an assertion without repeating it or formulating an equivalent proposition. Instead, one says things like 'What Oscar says is true' (p. 3) or 'Einstein's law is true' (p. 32). Application to unformulated propositions also allows truth to serve as a device for infinite conjunction, enabling the assertion of generality. This minimalist role for truth is in full accord with the equivalence schema, since all that is needed to explain how it functions is the entailment from the truth of *p* to *p*. Horwich notes that this account of the function of truth distinguishes minimalism from the

redundancy theory, since it requires application of the truth predicate to yield 'statements about the propositions to which it is applied' (p. 39), rather than propositions identical in meaning to the original.

The purity of minimalist truth exempts it from problems with the truth of existence claims which face the evaluative concept of truth. Instances of the equivalence schema do not themselves yield any connection between the existence of entities such as electrons and the rightness of believing in them. For the condition under which the proposition *that electrons exist* is true is simply the condition that electrons exist. And that condition can obtain independently of an epistemic warrant for belief in their existence.

However, such epistemic neutrality leaves room for an Ellis-style objection to minimalism. Ellis criticizes theories like the redundancy theory, for which truth is a device for economy of expression, on the same grounds as he objects to the view that truth is a mapping relation: namely, they cannot account for the value of truth. Since minimalist truth has no intrinsic evaluative component, how can Horwich account for its value?

For Horwich, truth's value is its practical utility: 'any further interest in it is entirely optional' (p. 65). We value true beliefs because they lead to successful action. Thus, we may want something and believe we can get it by performing a certain action. If we perform the action and our belief is true, then we get what we want. Minimalism has a simple explanation of this. Consider the belief that by performing an action a given result will be obtained. If this belief is true, then it follows *via* the equivalence schema that performing that action will produce the result. So, by basing action on true beliefs, we achieve the results we desire: that is their value. Minimalism therefore has no need to define truth as intrinsically valuable in order to explain its value to us.

Do we, nevertheless, search for truth in its own right? Perhaps we do. Minimalism does not deny that our interest in truth may exceed its instrumental value. It merely denies that value, instrumental or otherwise, need be built into the concept of truth.

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Scepticism. BY CHRISTOPHER HOOKWAY. (London and New York: Routledge, 1990. Pp. xii + 251. Price £35.00 h/b.)

The series in which this book appears is fast becoming a set of valuable tools in the philosophy teacher's kit bag. Christopher Hookway's book on scepticism is a pleasing addition. It does admirably the two tasks which series members are meant to perform: it gives to serious students and professionals a useful survey of the high points of the history of philosophical scepticism ancient and modern, putting familiar present-day versions in perspective; second, it presents an account – in the common-sense/pragmatist tradition – of how scepticism, where it can and should, may be effectively countered.

The historical part, necessarily selective, is devoted to the ancient Greek Pyrrhonists, Descartes, Hume and philosophers of the common-sense school,