Notre Dame Journal of Formal Logic
Volume 34, Number 1, Winter 1993

Book Review

Raymond Bradley. *The Nature of all Being: a Study of Wittgenstein's Modal Atomism.* Oxford University Press, Oxford, 1992. 244 pages.

This is an excellent book. It will interest both students of the *Tractatus* and philosophers who consider the metaphysics of modality.

Is another commentary on the *Tractatus* justified? Bradley answers "Yes," on the grounds that, up to the present, nobody has carried far enough the study of modality in Wittgenstein's earlier thought. Bradley argues, indeed, that an account of modality lies at the center of the Tractarian metaphysics. He makes considerable use of the *Notebooks 1914–1916*, whose value for interpreting the *Tractatus* has not, he thinks, been sufficiently appreciated. A final chapter compares and contrasts Wittgenstein's position with that of Robert Adams, Carnap, David Lewis, Rescher, Stalnaker, and the present reviewer, generally to Wittgenstein's advantage. This gives the book a usefulness that goes well beyond mere exegesis.

For Bradley, the Wittgenstein of this period is a thoroughgoing metaphysician, holding to a "modal atomism." The first chapter of the book notes agreements with, but also explores differences between, this position and Russell's "epistemological atomism" of the same period. Both philosophers held that the actual world is the totality of facts, facts having as their constituents particulars, properties and relations, facts that are ultimately analyzable into atomic facts, the latter having none but simple constituents. Russell's atomic particulars, however, are sense-data, objects of experience, whereas Wittgenstein's ultimate products of the last analysis are not objects of acquaintance at all. Furthermore, "whereas Russell's particulars are ephemeral, passing, fleeting, momentary things, Wittgenstein's are substantial, permanent, unalterable, and unchanging" (p. 11). It would seem, then, that Wittgenstein's particulars, though temporal, lack temporal parts. Bradley does not explore this interesting point.

Russell's official view of the modal notions is a skeptical one, although there is a good deal of unofficial backsliding. But Wittgenstein is no modal skeptic. Indeed, Bradley argues, Wittgenstein's key notion of *tautology* is "essentially semantic and modal in character" (p. 18). To say that a proposition is a tautology is to indicate that it is true in all possible circumstances, or even, with Leibniz, that it is true in all possible worlds. I must leave it to scholars of the *Tractatus* to say whether Wittgenstein's notion of tautology was meant to bear so much

metaphysical weight. But it makes for an interesting interpretation of Wittgenstein's argument.

A final contrast drawn between Wittgenstein and Russell is that, whereas the latter rejects *de re* necessities, Wittgenstein gives his objects differing *internal natures* which necessitate what sorts of further object the object in question can combine with. If Bradley is right in this, then there is a divergence from Leibniz here, because for Leibniz all simple properties are compossible.

In Chapter Two, "The Realm of Possibility," Bradley argues that Wittgenstein recognized, as a piece of explicit metaphysics, a realm of possibility wider than that of actual existents. Bradley usefully distinguishes three "degrees of possibilism." First there are nonactual but possible states of affairs that involve nothing but *actual objects.* (The scope of "objects", of course, extends beyond particulars to include properties and relations.) Second, there are nonactual but possible states of affairs involving nonactual objects, but objects that involve nothing but *simpler actual objects.* Finally, there are nonactual but possible states of affairs involving *simple nonactual objects.* These last are what Lewis calls "alien" objects.

Bradley asserts that Wittgenstein takes his possibilism "as far as it can go: to the third degree" (p. 29). Thus when Wittgenstein says at 2.0124 that "if all objects are given, then at the same time all *possible* states of affairs are also given," Bradley interprets "objects" here as including merely possible, and even alien, objects. This contradicts the interpretation, advanced by Ramsey and others, that for Wittgenstein possibilities are restricted to those that involve *actually existing* simple objects.

The system of modal logic that best suits Wittgenstein's position, Bradley argues, is S5. In particular, he recommends the S5A of Crossley and Humberstone. S5A is suitable if one wishes to allow the very same objects to exist in more than one world, and also to pick out *rigidly* just one world as the actual world. Bradley thinks that Wittgenstein held both these views. (Famously, these doctrines are denied by David Lewis.)

Chapter Three, "The Essence of the World," completes the exposition of the strictly ontological part of Wittgenstein's system. Bradley distinguishes between metaphysical, semantical, and epistemological simplicity, re-emphasizing that it is *metaphysically* simple particulars, properties, and relations that are the ultimate, though not observed, atoms of Wittgenstein's ontology. Despite their simplicity, though, each simple object is "indissolubly and polygamously wedded to several *formal* properties, each of which is 'part of the nature' of that object" (p. 80). A *de re* necessity binds such properties to their possessors. It is these formal properties that determine and limit the possible states of affairs into which that sort of object can enter. Quantified S5 is required to express this view.

This leads on to the most striking contention of this chapter, or, indeed, of the book. Bradley rejects the famous *Tractatus* doctrine that atomic states of affairs are all logically independent of each other. This thesis, Bradley asserts, is quite inconsistent with the main lines of Wittgenstein's position. Consider, for instance, the situation where event e_1 precedes e_2. This, Bradley argues, logically rules out the state of affairs of e_2 preceding e_1, or the two events being simultaneous. So independence fails. It could be said that these states of affairs are not atomic, but Bradley claims that this would be no more than waving the hand.

Wittgenstein should have restricted his independence doctrine to "entirely different" states of affairs (p. 105). Bradley says that he has therefore "concentrated on showing how the rest of Wittgenstein's Tractarian doctrines hang together" (p. 120).

It remains to say that for Wittgenstein a possible world is a possible totality. It is a maximally consistent set of states of affairs: a set of states of affairs with a closure condition.

In a fourth chapter Bradley considers the *Tractatus* theory of language, and the way that language mirrors the worlds of this modally atomistic metaphysics. He argues, in particular, that Wittgenstein's distinction between saying and showing provides a better solution to problems about identity than does Frege's distinction between sense and reference.

The fifth and final chapter stages a confrontation between Wittgenstein and subsequent metaphysicians, a confrontation which Bradley uses, among other things, to illuminate further what he takes the metaphysics of the *Tractatus* to be. He begins by defending the idea—the Leibniz/Wittgenstein idea as he sees it—of one actual world set in a sea of merely possible worlds, defending it against Lewis's relative or indexical theory of actuality. Bradley criticizes an argument very briefly set out by Donald Williams and subsequently endorsed by Lewis and myself. I presented the argument as a proportional syllogism:

(1) All but one of the infinity of worlds are merely possible (hypothesis).
(2) This is a world.
Therefore (very probably),
(3) this world is merely possible.

I then claimed that (3) denies a bedrock proposition of commonsense, (2) is obviously true, so that we have good, if not totally conclusive, reasons to reject (1), which is the Bradley/Leibniz/Wittgenstein hypothesis.

Bradley in effect points out that for this argument to be a good one the so-called Total Evidence condition must be met. That is to say, there must not be *independent* good reasons to believe that (3) is false. If we have such reasons, then the argument collapses. Furthermore, Bradley asserts that we do have such independent rational assurance of the falsity of (3).

This last, however, I dispute. In the assumed context, assumed in order to test the theory, a context where merely possible worlds do have being, even if second-rate being, there are innumerable merely possible worlds whose inhabitants either take for granted, or are totally convinced on reflection, that their world is actual. So what reason could we have, in the situation hypothesized, to think that we are in the one world that is actual?

Bradley also sets up what he claims to be a parallel argument, intended to be an *ad hominem* argument against my own fictionalism about possible worlds:

(4) All but one of the infinity of worlds that philosophers talk about are merely fictional (hence nonexistent).
(5) This world is one of the worlds that philosophers talk about.
Therefore (very probably),
(6) this world is merely fictional (hence nonexistent).

To this I reply that (4) does not postulate an infinity of *entities*, things with at least some measure of being, a postulation that would be necessary for the first premise of this proportional syllogism to be anything more than grammatically a statement that a plurality of entities exist. Hence the argument has no force. So I continue to claim that, once we take possible worlds to be entities of the same general sort as our own, we are forced from the view that the distinction between the actual world and merely possible worlds is an absolute one. We are forced toward Lewis's theory. And if the latter is unsatisfactory, as I think it is, then we must look for some more pussyfooting theory of possible worlds.

Robert Adams has a further argument against taking this world to be actual while granting the merely possible worlds a real if lesser grade of being. The other worlds, Adams argues, could not possibly be actual, hence the actual world is the only world that could be actual, hence whatever is actual is necessary, an apparently discouraging conclusion. Bradley argues at length that we can live with this conclusion provided that we distinguish between truth and actual truth, and between existence and actual existence. I am suspicious of Bradley's way out but do not feel certain about the matter.

Turning to Adams's own theory, which is that possible worlds are maximally consistent sets of "abstract" but *actual* propositions (world-stories), where the maximally consistent set, all of whose propositions are true, is the only such set to which the actual world corresponds completely, Bradley makes two criticisms. The first is that the proposition:

(7) Ronald Reagan could have remained a film actor,

which a possible worlds theorist will analyze in the first place as:

(8) There is a possible world in which Ronald Reagan exists and remains a film actor,

must be analyzed further by Adams as:

(9) The proposition, that Ronald Reagan remained a film actor, is a member of some world-story not all of whose propositions are in fact true.

But, Bradley objects, (9) substitutes a *de dicto* belief about a proposition for *de re* belief about Reagan himself.

My own reaction is that if this is the worst that can be said against Adams's theory, then this is something that Adams can live with, particularly if it is added, as Adams would add, that all his world-stories are internally consistent. I will add that it is a pity that Bradley uses the example as an opportunity to express his political feelings about Reagan (p. 176). One had hoped that this sort of thing had stopped some years ago.

Bradley's second criticism of Adams's theory is that it is unfitted to deal with "alien" objects. But if the existence of alien particulars, properties, and relations is really a possibility, then it would seem that Adams could postulate abstract propositions that (falsely) assert the existence of such objects.

Besides rejecting Lewis's indexical theory of actuality, Bradley objects in the usual way to his counterpart theory as an account of the "same" particular in different worlds. It is Reagan himself that could have remained a film actor, not a mere counterpart which more or less resembles our Reagan. Bradley says that on Wittgenstein's view Reagan himself can inhabit a merely possible world, which

I think we can agree with Bradley is a theoretical advantage, one to be welcomed if it can be gained.

Bradley, however, fails to address, as I think he should address, Lewis's reason for going no further than counterparts. This reason, if good, would hold for Bradley's Wittgenstein, at any rate for such cases as that of Reagan. (It would not hold for the immutable simple objects.) The difficulty is that the particulars supposed to be identical across worlds will often have incompatible nonrelational properties, incompatible "accidental intrinsics" as Lewis puts it. Thus, Hubert Humphrey may be five-fingered in one world, six-fingered in another. Lewis argues in detail, correctly I believe, that there must be "different Humphreys" in the two worlds to make this possible. I will just add that it is one of the advantages of a *fictionalist* account of merely possible worlds that there is then no bar to strict identity of particulars "across worlds."

Moving to Carnap, Bradley points out that Adams's abstract propositions and his account of merely possible worlds in terms of maximally consistent sets of propositions, can be seen as a more metaphysical version of Carnap's state-descriptions and maximally consistent sets of state-descriptions. (Bradley emphasizes what he thinks has been somewhat overlooked: the way that Carnap's thought develops from that of Wittgenstein.) But, of course, Carnap recognizes only actual sentence-tokens, and, as Bradley says, there are far too few of these to deal with the infinity of possible worlds.

Rescher tries to give a conceptualist account of possibility, and so faces the same sort of difficulty. Bradley also criticizes him for trying to give formal logic the decisive role in determining all possibility and impossibility. As Bradley says, one well-known type of case that resists such treatment is that of the color incompatibilities.

Stalnaker's is the next position to be examined. His position is close to that of Adams except that, whereas Adams gives an account of possible worlds in terms of propositions, Stalnaker gives an account of propositions in terms of possible worlds. In Stalnaker's theory the worlds themselves, like Adams's propositions, are "abstract" entities that are part of the actual world. They are *ways things might have been*, construed as properties, but they are properties that are not instantiated. (*The way the world actually is* is an instantiated property of the world.)

Against the reduction of possibilities to worlds, Bradley makes a stock but I think very forcible objection, viz. every necessary truth becomes the same proposition, because each necessary truth is identical with the same set, the set of all worlds. More generally, this account of propositions, besides offending against a robust sense of reality, is too coarse-grained to account for the distinctions that we want to make between propositions.

Bradley also argues against Stalnaker that if ways things might have been are uninstantiated, then nothing can have these properties. So ordinary objects necessarily lack these properties, hence ordinary objects have their properties necessarily.

Against my view, Bradley makes three points. First, he argues that aliens, that is to say particulars and universals that are neither identical with any actual particulars or universals, nor combinatorially constructible from these actuals,

are possible, I, however, cannot account for such possibilities within my combinatorial theory. Bradley, I now think, has a good point here. My treatment of aliens was not very satisfactory, and it remains to be seen whether there is a more satisfactory treatment available to a combinatorialist.

Second, Bradley objects to my Leibniz-like contention that all wholly distinct properties and relations are compossible. This thesis is required for the logical independence of elementary states of affairs. It is taken over from the *Tractatus* but is a thesis which, as we have seen, Bradley thinks cannot be consistently defended by Wittgenstein. Taking up a particular case, Bradley criticizes my attempt to argue that when *a* occurs before *b*, this does not exclude the possibility that *b* occurs before *a*. To try to show that *before* is not a necessarily asymmetrical relation, I argued for the possibility that time could be circular, in which case *a* would be both before and after *b*. Bradley says that if *a* occurred only a minute before *b*, then my supposition is absurd. But, *pace* Bradley, once the circularity of time is allowed to be a possibility, there seems no objection to the more particular possibility that the circle should be very brief. That there is such a brief circle is, of course, a false supposition, but my argument requires no more than that the supposition be a possible one.

Third, Bradley criticizes my restriction of the doctrine of the combinatorial promiscuity of wholly distinct elements to those combinations *which respect the form of atomic states of affairs.* The italicized restriction, he says, reintroduces in a circular fashion the modality which I purported to analyze combinatorially. Here I think that Bradley, excusably perhaps, has overlooked my idea that the propositions setting out the combinatorial theory, including the theory of the atomic states of affairs, are neither necessary nor contingent. The thought is that if one is proposing a reductive theory of modality, as I am, then the propositions that set out that theory ought not themselves to have modal properties. They can at best be true. This consideration, if correct, will apply to all the basic propositions that set out the theory of the world as a world of states of affairs.

Bradley ends this chapter, and the book, by proposing a geometrical model for the Bradley/Wittgenstein modal atomism, modal atomism minus the alleged myth of independence. On a two-dimensional surface, there are objects of various shapes and sizes. To the different types of object correspond the different simple properties. (No model is proposed for relations.) Some shapes can quite naturally be fitted into each other. For instance, a certain shape may fit snugly into another shape, because the convexity of one of its sides fits into the concave side of the second object, a concavity having the same size and radius of curvature as the convexity. Other shapes will not fit together, for instance, two circles. The ability of a certain shape to fit together with another shape type is then taken to be a representation of a simple property's ability to be co-instantiated with another simple property. *Promiscuous* combination of properties is absent, just as it is in Bradley's Wittgenstein.

The model is of some value in understanding Bradley's interpretation, but it should not be thought that it has explanatory force. In the first place, despite what Bradley says, the geometrical properties that he uses are clearly not simple properties. Even abstracting from size, being square or triangular or circular are complex (structural) properties. Their "fit" or "lack of fit" with other

properties surely depends on this complexity. The model in no way challenges the idea that *simple* properties are all compossible.

In the second place, Bradley's definition of "fit" is somewhat arbitrary. Why should not two circles or other shapes that can meet only at a point be said to "fit" together? This appears to make all properties compossible. Bradley can certainly rule out such minimal fit, but then it is clear that the model gives no ontological guidance. It is *merely* a model.

To sum up. Bradley gives us a bold and novel reading of the modal views espoused in the *Tractatus*. He also does a very useful job in comparing and contrasting this position with later accounts of the metaphysics of modality. His arguments are not, in my opinion, always convincing. But that's philosophy.

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