
In *Objects and Persons*, Merricks addresses many important topics, and argues for his positions with wit and vigour. (The first sentence is, 'In this book I shall show that there are no books'.) Merricks critically assesses the deliverances of what he takes to be 'folk ontology'. Folk ontology regards books, baseballs, statues, and organisms as existing objects. Merricks argues, on the one hand, that there are no baseballs, statues, or other inanimate macrophysical objects, but, on the other hand, that there are organisms. Thus, like van Inwagen, Merricks is an eliminativist about inanimate macrophysical objects, but a realist about organisms. Merricks bases the ontological asymmetry between animate and inanimate macrophysical objects on a putative difference in causal powers: if statues or baseballs existed, their causal powers would be equivalent to those of the atoms that compose them [128]. But conscious organisms, in contrast, have nonredundant causal powers; indeed, 'human persons have downward causal control over their constituent atoms' [199]. So, inanimate macrophysical objects are, or would be if they existed, 'causally redundant' [vii], but human organisms are not. Such a causal difference would ground an ontological difference.

The first part of the book is the argument for eliminativism concerning inanimate macrophysical objects. After arguing that eliminativism can treat a variety of puzzle cases, Merricks presents a direct argument in two stages: first, he undermines our evidence for baseballs by pointing out that sensory evidence would not distinguish between views that there is a baseball and there are atoms-arranged-baseballwise. So, 'unless we have some extraordinary reasons, we have no good reason to believe in baseballs' [73]. Second, he appeals to his Overdetermination Argument to show that baseballs (as opposed to atoms arranged baseballwise) have no causal efficacy.

For the Overdetermination Argument, we need two notions. First, an object O is causally irrelevant to whether the xs acting in concert, cause an effect E if and only if (i) O is not one of the xs; (ii) O is not a partial cause of E, alongside the xs; (iii) none of the xs cause O to cause E; and (iv) O does not cause any of the xs to cause E [57]. Second, an event E is overdetermined if: (i) E is caused by an object O; (ii) O is causally irrelevant to whether some other object or objects cause E; (iii) the other object or objects 'do indeed cause' E [58].

Here is a generalization of the Overdetermination Argument:

\[(1^*) \text{Inanimate macrophysical object } O; \text{ if } O \text{ exists, it is causally irrelevant to whether its parts, } P_1, \ldots, P_n, \text{ acting in concert, cause effect } E.\]

\[(2^*) F \ldots F \text{ cause } E.\]

\[(3^*) E \text{ is not overdetermined.}\]

\[(4^*) \text{If } O \text{ exists, } O \text{ does not cause } E.\]

Here is the argument for the elimination of inanimate macrophysical objects:

1. If there were inanimate macrophysical objects, they would not have causal powers (generalization of the Overdetermination Argument).
2. If there were inanimate macrophysical objects, they would have causal powers. (Thesis linking existence to causal powers [81]).

So, 3. There are no inanimate macrophysical objects [81].

The Overdetermination Argument is supposed to support the first premise of the argument for eliminativism. But is the universal generalization of the Overdetermination Argument sound? It seems not: A flag may have the effect of bringing tears to your eyes. Then, either the parts of the flag have that effect or they do not. If they do not, then (1*) is true, but (2*) is false. If they do, then (2*) is true, but (1*) is false. If your tears were an effect of the constituent atoms, it would be only because those atoms made up a flag; so, the flag would not be causally irrelevant to the atoms' causing your tears. Either
way, one of the premises is false. So, I don’t think that the generalization of the Overdetermination Argument is sound.

Closers to Merricks’s own examples, consider statues and baseballs as counterexamples to (2*). Statues, and not their ‘parts working in concert’, cause the owners’ bills to soar [128]. Baseballs, and not their ‘parts working in concert’, cause fans to fight [80]. Their parts have nothing to do with statues or baseballs’ causal connections with soaring insurance premiums or fighting fans. Of course, the huge class of inanimate objects whose causal powers do not supervene on their microcomponents is prominent in the folk ontology at which Merricks takes aim.

It thus seems that inanimate objects have many effects in virtue of having properties that are not objects; the significance of the macrophysical objects does not lead to systematic causal overdetermination argument, and the argument for elimination of inanimate macrophysical objects does not succeed. (The flag example, and others like it, also show that properties of the ‘constituent atoms, acting in concert’. So, commitment to inanimate macrophysical objects is false.)

In the second part of the book, Merricks argues that the considerations that he thinks lead to the elimination of inanimate macrophysical objects do not eliminate us. Conscious organisms escape the net of the Overdetermination Argument. Human organisms, dogs, and dolphins are ‘causally non-redundant’ [114–15]. Merricks sees a ‘deep, fundamental difference’ between conscious organisms and inanimate macrophysical objects in that organisms’ cause things that their parts do not. Conscious organisms have non-redundant causal powers and exercise downward causal control over their parts [116].

Merricks’ argument that human organisms do not fall to the Overdetermination Argument is quite long and arduous. Although I cannot begin to do justice here, let me just note that if it is as sound, then there can be some atoms that compose a person, and some atoms intrinsically like the first atoms, with the same spatiotemporal and causal interrelations, that do not compose a person [94]. Echoing the Chalmers’‘zombie’ argument as it does, this thesis is an odd consequence for a view that aspires to be materialistic. (I agree that persons have non-redundant causal powers that do not supervene on their microcomponents; however, I do not believe that the relation between a person and the atoms in her is a mereological relation of ‘composition’.)

I want to conclude by asking two larger questions about Merricks’s position. First: to what extent is his noneliminativist view of human organisms a materialistic view, as he intends it? Four things make me wonder: (1) Merricks holds that we are organisms, but does not want to invoke biological persistence conditions [133]. He thinks that no organs exist [135]. (2) He also supports incompatibilist free will [158], a position that seems to me to exempt human free will from the laws of nature. (Does he think that dogs and dolphins also have incompatibilist free will?) If not, why not? (4) As I mentioned, Merricks appears to think that duplicate arrangements of atoms can differ in whether they compose a human organism [94]. What kind of materialism is compatible with these theses?

Second: to what extent is Merricks’s eliminativist view of inanimate macrophysical objects a substantive alternative to folk ontology? One might wonder whether the difference between affirming and denying that there’s a statue where there are atoms-arranged-statue-wise resides in a choice of words: you can translate my statue-sentences into atoms-arranged-statue-wise-sentences, and I can translate the other way. (In order to find a genuine disagreement, Merricks denies that composition is identity [21]. But, then, how does he account for the relation between the atoms-arranged-human-organismwise and humans that, grants, do exist?)

Another reason to doubt whether Merricks’s position on inanimate macrophysical objects is a genuine alternative to folk ontology springs from his distinction between ‘true’ and ‘nearly as good as true’. ‘Any folk-ontological claim of the form “F exists” is nearly as good as true iff (i) “F exists” is false, and (ii) there are things arranged F-wise’ [171]. What work does the alleged distinction between ‘true’ and ‘nearly as good as true’ do? When Merricks says, ‘There’s a chair’ in ordinary contexts, expressions is true if the proposition that there are atoms-arranged-chair-wise. The proposition that Merricks expresses is true if the proposition that the folk express by the same sentence is nearly as good as true [186]. Merricks argues that eliminativism can accommodate our practices: It doesn’t matter whether the bucket swangs a bat or swings atoms-arranged-batwise. Just so.

Finally, consider Merricks’s response to the charge that our evidence for microscopics, which Merricks thinks do exist, depends on laboratory equipment that, on his view, does not exist. ‘In response, just so long as our “laboratory equipment beliefs” are nearly as good as true, we can make use of these beliefs… in coming to know about atoms or other microscopic entities’ [175]. This suggests that ‘nearly as good as true’ is really just as good as true’. One may suspect that appeal to things arranged F-wise is just a metaphysician’s odd way of talking about Fs.

Lynne Ruddick Baker University of Massachusetts Amherst


This volume of essays brings together a central work, work spread over many years, of an important philosopher of science. Alan Musgrave owes his intellectual formation to Karl Popper and Popper’s own position. We are given positions of Musgrave’s own, positions well worthy of independent consideration.

The first portion of the book is a defence of scientific realism. Chapter 1 is based on a 1977 paper where he criticises descriptivism, the view that scientific theories do not explain but merely describe. He shows that such theories both describe and explain, and that Galileo and Newton, for explaining all sorts of things, for instance the tides. The question then arises whether there may not be such theories are true, they will be explainers that are not themselves explained.

Musgrave allows that this is a possibility, although he finds Popper’s position that the universe ‘is like an onion with infinitely many skins to be peeled off successively, but with no ultimate centre the paper he gives a little list of propositions a scientific realist might uphold. (1) Scientific theories are theories that can be checked as true. He agrees with Popper in rejecting this. (2) Some of these theories are ultimate, and so cannot be explained. (4) One of these theories explains everything (except for the facts of existence).

Instrumentalists go even further than descriptivists, denying that scientific theories are even descriptive. Chapter 2 is an extended rebuttal of the view upheld by Pierre Duhem that instrumentalism was rife in ancient Greek astronomical thinking, in particular in Plato and Ptolemy. This view was once accepted. I have no expertise on the fact but his reaclaiming of Plato and Ptolemy for instrumentalism is, to my knowledge, the only instance of crystalline spheres really exist and carry the heavenly bodies around. The Greeks were surely realists in their scientific speculations. Instrumentalism is a modern disease.

A useful acute observation of experiments in the present volume, experiments in the present volume, is to substitute mere instructions for general instructions that are taken by this view was that Gilbert Ryle. Musgrave shows, rather easily I think, that the arguments advanced for this position are not strong. Perhaps the position cannot be refuted, but, those who value validity in arguments will reject it.

In Chapter 5 Musgrave confronts van Fraassen’s ‘constructive empiricism’. For him good scientific theories are both truth and falsity. In this position, Musgrave points out, is relatively difficult for realists to argue against because Musgrave is able to identify some real problems of relative detail for van Fraassen’s view, discussion of which must be omitted here.

The first half of the book concludes with a critique of Idealism, the metaphysically polar opposite of scientific realism. Musgrave accepts (rightly I think) David Stove’s view that the idealism of Berkeley and other idealists, is nothing but an invalid deduction from a tautology or a family of tautologies, for instance ‘I can only perceive what I perceive, so the physical world cannot exist beyond my perception’. (Stove called this sort of argument ‘the gem’, but he was not intending to be kind.) It is interesting to see the particular kind of damage. Consider, I desire my desire, so every desire of mine is a selfish one’. But as Musgrave insists, one can’t derive any conclusion of interest from a tautology.

The second part of the book is heavier going than the first half. It examines deep issues that come up for a broadly Popperian philosophy of science, indeed for any philosophy of science. A central thread is David Stove, who himself rejected the doctrine, but Musgrave makes no acknowledgement.) Descriptivism is the view that the only good arguments are valid arguments. This involves scientific rubbish.