

Impotence and Collateral Damage: One Charge in Van Fraassen's Indictment of Analytical Metaphysics

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One important component of Bas van Fraassen's 1999 Terry Lectures is an attack on "analytic metaphysics." Indeed, the title of the first lecture (which contains the core of the attack, but by no means the whole of it) is "Against Analytic Metaphysics." In the Introduction to *The Empirical Stance*¹ (the lectures in book form), van Fraassen says,

As I see it, analytic philosophy . . . began with a revolution that was subverted by reactionary forces. I am speaking here of a reversion to a seventeenth-century style of metaphysics. (xviii)

It is certainly true that van Fraassen sees no important distinction between the methods and goals of, on the one hand, those philosophers of the present day who profess and call themselves both analytical philosophers and metaphysicians, and, on the other, those seventeenth-century philosophers whom the writers of textbooks call the Continental Rationalists. In a note to "Against Analytic Metaphysics," a note that is supposed to describe the "discredited [*sc.* by Kant] form of metaphysics" that is his target, he says

The type of metaphysics to which I refer, and which I take to be the enterprise engaged in by . . . Descartes and Leibniz, is characterized by

the attempted construction of a theory of the world, of the same form as a fundamental science and continuous with (as an extension or foundation of) the natural sciences. (231 n. 1)

I will let other “analytic metaphysicians” speak for themselves. For my part, I deny that this description has any application whatever to my own work. And it strikes me that to suppose that everything that is done by those philosophers who would describe themselves as both ‘analytical philosophers’ and ‘metaphysicians’ corresponds to any such neat description—that one or any other that is equally specific—is verbal essentialism at its worst. What is called ‘analytical philosophy’ by those who apply that term to their own work has not got an essence; and neither has what is called ‘metaphysics’ by those who apply both that term and ‘analytical philosophy’ to their work.

The charges that van Fraassen brings against the fiction he calls “analytic metaphysics” are many and various. And I must concede that some of them stick—not to analytical metaphysics, which does not exist (other than as a gerrymander whose only principle of unity is the application of the words ‘analytical metaphysics’ by various people to its widely scattered members), but to some things that have been written by some philosophers who would be willing to say, “Yes, I’m an analytical metaphysician.” For example, I heartily applaud all that van Fraassen says against those philosophers who ape the practice of scientists—or what they take to be the practice of scientists—by appealing to “the method of inference to the best explanation.” If I had ever thought that there was a method called “inference to the best explanation” that could be used as instrument of philosophical discovery (or which could be used to validate a philosophical theory however it had been discovered), van Fraassen would have convinced me otherwise. But thank God I never have!

There is a second charge that van Fraassen brings against analytical metaphysics (against everything that has been done under that name), that I believe has considerable merit: that, in contrast to the scientist who advances a scientific theory, the metaphysician who advances a metaphysical theory risks nothing more than falsehood. (Assuming, of course, that that metaphysical theory manages to have a truth-value at all. No doubt a significant proportion of the metaphysical theories on offer are, as Pauli once said of a fellow physicist’s conjecture, “not even false.”) And falsehood that is never going to be conclusively demonstrated to be such. If a metaphysical theory is false, its falsity is in every case like the identity of the Unknown Soldier: Known but to God. But this serious and entirely apposite charge seems to me to be applicable *throughout* philosophy, applicable to the whole of it—including van Fraassen’s own contributions to the subject. (His empiricism is not a body of statements but only a “stance.” Well and good. Nevertheless, van Fraassen’s writings do contain lots of statements. He does say lots of things that are either true or false, and many of them are essential to the case he is engaged in making when he says them. And he *is* in the business of making cases; he does attempt to get his readers to believe things. A significant proportion of these statements, moreover, are neither statements of verifiable fact nor statements that in any other

way, as the phrase goes, face the tribunal of experience; they are neither statements like ‘Kant gives a definition of “world” in the *Inaugural Dissertation*’ nor statements like ‘Inverse beta decay may lead to a rapid drop in electron pressure within the core of a large star and a consequent rapid collapse of the central core region.’²) This charge against analytical metaphysics, if applied without prejudice, represents a serious challenge to philosophy itself, a challenge to which philosophers have never properly responded (and have not, for the most part, allowed themselves to be aware of). It has no *specific* application to metaphysics (however the boundaries of metaphysics may be drawn). If it applies to my book *Material Beings* or to Ted Sider’s *Four-Dimensionalism* or to Hud Hudson’s *The Metaphysics of Hyperspace*, it applies with equal force to *Language, Truth and Logic* and to *A Theory of Justice* and to *Laws and Symmetry*.

Some of the charges, I have said, stick. Not all of them. In this paper, I want to examine one very specific charge, one among many, that van Fraassen brings against “analytical metaphysics”: the charge that analytical metaphysics must be either a purely formal exercise, unconnected with any of the things we care about, or else must create mere simulacra of the things we care about, simulacra that it dishonestly tries to pass off as the genuine article.

Van Fraassen’s argument for this conclusion proceeds by drawing lessons from an illustrative example. It begins with these words:

I propose that we consider a very simple question or problem, admittedly in the domain of metaphysics, but the simpler and more elementary the better. If the discipline is shown up even there, the interested reader may then consider whether those flaws or failures do not also characterize more ambitious examples . . . Freedom or personal identity would be a good topic to choose, if it were not for their complexity, in which we would lose sight of the forest for the trees. We need a different example, one that should look sufficiently simple to us today.³ I submit that the methodological critique will bear on the enterprise quite generally . . . To show you both the impotence and the collateral damage wrought by metaphysics, I must choose a question at once simple to answer, yet touching on something intuitively of genuine importance to us. The following question is surely among the very simplest we can ask:

Does the world exist?

. . . Doesn’t the answer seem obvious to you? We are all part of this earthly ecosystem, which is part of the solar system, and that is part of the Milky Way galaxy, and so forth. Surely this progression has an end, a final term? And that is what we all agree in calling the world. (4–5)

Having said this, van Fraassen goes on to point out that the little argument he has presented for the “obvious” thesis that there is a world (“We are all part . . . what we all agree in calling the world”) is invalid—the invalid step being introduced (as an invalid step in an argument so often is) by the word ‘surely’: it doesn’t follow from the existence of a series of ever-larger and ever-more-inclusive objects that the

series has “an end, a final term.” (In case the similarity of this argument to certain “famous proofs of the existence of God” is insufficiently obvious, van Fraassen calls the reader’s attention to it.) Nevertheless, it would seem, we can *ask whether* the series has an end; we can *proceed to investigate the question*; we can ask *this*:

. . . is there in addition to all these real things [the ecosystem, the solar system . . .] also a thing, a totality, if you will, of which they are parts? (6)

“Now,” van Fraassen tells us, “we have a metaphysical question.” And this, for van Fraassen, is typical of the way in which metaphysicians invent questions for themselves to answer. Ordinary folk are living their lives, content in their belief that there is a world; then the metaphysicians come along and point out that once the question whether there is a world has been made “precise”—‘In addition to all these real things is there also a thing, a totality, of which the ecosystem, the solar system, and so on are parts?’—it is not evident that there is a world. And, this initial piece of misdirection having been accomplished, the metaphysicians will go on to perform a feat of conceptual sleight-of-hand. They will create, before the very eyes of their audience of ordinary folk, the metaphysical problem of the existence of the world. The illusion, being conceptual, is not a creature of smoke and mirrors but of words. Words along these lines. “You must, you see, appeal to us metaphysicians if you want to find out whether what you had innocently believed—that the world exists—is true. And if you are rational, you *will* want our services in this matter. After all, when you innocently believed in the world, you regarded it as an important thing. The world is where we all live, after all—that is, it’s where we all live if it exists. It’s what cosmology studies—if there’s anything for cosmology to study. It’s what cosmopolitans want to be citizens of—if the object of their desire indeed exists. There are certain things that are so important to you that you wouldn’t trade them even for it—if it’s there to be traded for. Just as those of you who think that God is important will, if they are rational, want to hear what we metaphysicians have to say about his existence, so those of you who think that the world is important will want to hear what we have to say about *its* existence.”

And what will the metaphysicians say to us ordinary folk if we ask them please to tell us whether there is a world? They will say that the first step toward answering the question ‘Does the world exist?’ must be to make it as precise as possible—for (they will tell us) there’s no point in trying to answer a metaphysical question until one has posed it in as precise a way as possible. (Have we not learned from William James that, “Metaphysics means only an unusually obstinate attempt to think clearly and consistently”?) And that will come down to providing a precise definition of ‘world’: ‘A thing, a totality, if you will, of which all these real things are parts’, it transpires, was no more than a preliminary, intuitive gesture in the direction of a definition (its provisional status was signaled by the words ‘if you will’)—good enough to establish the conclusion that it’s not obvious that there’s a world, but not good enough to be a load-bearing member in a serious investigation of the existence of a world. “Attend to us,” the metaphysicians whisper seductively, “and

listen as we provide you with a really precise definition of ‘world’, a definition adequate to the austere demands of our science.”

And how will the metaphysicians define ‘world’? Van Fraassen invites us to consider a metaphysician’s definition of ‘world’, a definition he regards as typical, and which he takes from Kant’s (pre-Critical) *Inaugural Dissertation*: a world is ‘a whole that is not a part’ (7).

At this point I must ask my readers to indulge me in a digression. I will set aside for a moment my exposition of van Fraassen’s description of the way in which metaphysicians proceed, and, for the sake of that purely formal clarity that is so beloved of analytical metaphysicians like myself, I will make a series of comments on the definition of ‘world’ that van Fraassen has found in Kant.

- (1) Kant obviously means by ‘part’ what philosophers today mean by ‘proper part’. I confess that I am in genuine doubt about whether it is a consequence of the meaning of the word ‘part’ that everything is (strictly speaking) a part of itself.⁴ In what follows, I shall assume that the ordinary meaning of ‘part’ is such that everything is a part of itself, and that any considerations that apparently support the contrary position can be “handled” by arguments that appeal to such familiar ideas as “literally true, but a highly misleading thing to say in any normal context” and “conversational implicature.” I think nothing substantive hangs on this assumption. If the assumption is wrong, then I have simply made a bad choice in the matter of some of the words and phrases that occur in this paper.
- (2) If what I have said in (1) is right, then Kant’s *definiens* should *strictly and pedantically speaking* be stated this way: ‘A whole that is not a *proper* part’. And let us speak strictly and pedantically. (Recall Russell’s definition of ‘pedant’: “A man who likes his statements to be true.”) And I would make two more pedantic changes in Kant’s wording, owing to the fact that (as far as I can see) a ‘whole’ is just a thing that has proper parts, and the fact that, since ‘part’ is a relational term, the phrase ‘is not a part’ must be short for ‘is not a part of anything’. I would, pedant that I choose to be, write the *definiens* this way: ‘A thing that has proper parts and is not a proper part of anything’ or—even better, for someone may ask me what I mean by ‘thing’—, this way: ‘Something that has proper parts and is not a proper part of anything’.
- (3) The definition may seem to some to be rather an odd one—and not for any reason having to do with my pedantic fiddling with Kant’s wording. I myself think that my dachshund Sonia has proper parts and is not a proper part of anything. But I do not suppose that she is a world—I do not suppose that there is *any* sense of the word ‘world’ in which she is a world, any sense of ‘world’ in which *anyone* would ever have wanted to call her a world.⁵ This odd consequence is avoided by the following alternative *definiens*: ‘Something that has everything as a part’.⁶ (Note that the definition does not guarantee

the existence of a world, not even given that something exists. I have two dachshunds—Sonia I have mentioned; the other is Jack—and I believe that there is nothing of which both Sonia and Jack are parts. It follows from this belief of mine that there are no “worlds.” It follows that “the world”—for if there were any worlds, there would be exactly one of them: *the* world—does not exist.)

Here endeth the pedantic commentary on Kant’s definition of ‘world’. Van Fraassen has an objection to Kant’s definition that would apply equally to any of the revised definitions that I mentioned in the course of my commentary. It is this: Those philosophers who (like Kant when he was still slumbering dogmatically) want to use the word ‘world’ as a count-noun and who define this word in terms of ‘part’ are making illegitimate use of the ordinary words ‘world’ and ‘part’—they are, one might say, *illegitimately helping themselves* to these everyday words.

What van Fraassen means by this charge can be best explained by quoting a passage in which he shows “how a truly conscientious analytical philosopher would eschew the seduction of familiar wordage put to technical use”:

She looks to mereology and notices that in ordinary discourse the part-whole relation does not even seem to be transitive. After all, we philosophers are an important part of the university faculty, but are our knees part of the faculty? So she begins by introducing the technical term “Spart” and lays down the following principles:

1. If A is a part of B, then A is a Spart of B;
2. Spart-of obeys the axioms of basic mereology;
3. A Sworld is, by definition, something which is not a Spart of anything else.⁷

At this point, two decisions await. One is whether to add existence postulates, such as that certain definable Ssums of given entities also exist.⁸ . . . The other decision is whether to drop all those initial sibilants and thus stake out a position in ontology. (25–26)

It is the second “decision” that is the important one. It presents the conscientious analytical philosopher with a dilemma. If, on the one hand (or horn), she decides not to “drop the initial sibilants and stake out a position in ontology,” she is engaged in a mere formal exercise—clever and intricate, perhaps, but having no connection with any of the many things we care about whose description involves the use of the phrase ‘the world’. (The wages of pure formalism in metaphysics is impotence.) If, on the other, she does drop the initial sibilants, she is no longer conscientious. She has become one of those philosophers who make illegitimate use of ordinary words. Although she has made a show of defending her virtue, she has in the end succumbed to “the seduction of ordinary wordage put to technical use.” She has presented us not with the world that we care about but with a metaphysician’s simulacrum of the world that we care about.⁹ (“The collateral damage wrought by metaphysics” is the damage that afflicts those innocents who accept the simulacrum

as the real thing—or whose idea of the real thing is in any way infected by what they may have heard of the features the metaphysicians have ascribed to their simulacrum.)

But *does* a need to make the second decision confront the conscientious metaphysician? Why did she bother with the initial sibilants in the first place? Why did her conscientiousness lead to introduce the explicitly technical term ‘Spart’? (If she didn’t need to do that, a need to make the second decision will never come up at all.) The reason why went by rather fast. Let’s look at it again:

She looks to mereology and notices that in ordinary discourse the part-whole relation does not even seem to be transitive. After all, we philosophers are an important part of the university faculty, but are our knees part of the faculty?

This is one of van Fraassen’s arguments for the conclusion that philosophers who use ‘part’ to define the count-noun ‘world’ are making illegitimate use of the everyday word ‘part’. He had earlier given another, immediately after citing Kant’s pre-Critical definition of ‘world’.

Actually, at first sight Kant has not given us a very good definition. Look at this chair: It has parts . . . but is not itself a part of anything else. But it is not a world, is it? [Cf. my remarks about Sonia the dachshund in my third comment on Kant’s definition.] There is one heavy-handed way to deal with such an objection. Kant could simply insist that our ordinary commonsensical way of taking this chair to be separate and not a part of something is mistaken. He could say that it is part of something bigger. . . . But then he would be giving in to one of the temptations that make for really bad philosophy, surreptitiously and underhandedly turning the ordinary word “part” into technical jargon while ostensibly keeping it intact. (7)

This seems to me to be no argument at all. Suppose you think that there are two chairs in the room, and suppose that you think that there is an object x whose parts (in the ordinary sense of ‘part’) include all the parts of the two chairs¹⁰. That belief of yours may be *wrong*, but it’s a belief that can be stated using words only in their ordinary senses. (In that respect, if in no other, it’s like the things madmen say: ‘I saw a man who was twenty feet tall’ or ‘There’s an invisible cow in that pasture.’) That fact is conveniently attested (as Quine might say) by the fact that I just *did* state it using words only in their ordinary senses. Now suppose that, in addition to believing in the existence of this object x (philosophers who believe in it would call it the sum or fusion of the two chairs, but it makes no difference what anyone *calls* it), you believe that Chair One is a part of x —and say so. Must it be that when you make this assertion you are using the word ‘part’ in some special, technical sense?

Well, obviously not, since, given the way I defined ‘object x ’, ‘Chair One is a part of x ’ is a logical consequence of ‘ x exists’. But it’s hardly an unobvious consequence, a consequence one would reluctantly concede only after one had carefully verified all the steps in a formal deduction. *If* there’s such a thing as x , *obviously* Chair One

is a part of it—and a part of it in the ordinary sense. I don't, as a matter of fact, believe that there's any such thing as x , but it seems to me to be self-evident that if I'm wrong and x does exist, Chair One is a part of it.

“But it is a consequence of what we ordinarily mean by ‘part’ that there's nothing of which any two chairs are both parts. A philosopher who says that there is something of which two chairs are both parts has to be using the word ‘part’ in some technical sense.” I reject the kind of thinking that statement exemplifies. In my view, that statement and the following statement are wrong for the same reason: “It is a consequence of what we ordinarily mean by ‘invisible’ that no cows are invisible. A madman who says that there are invisible cows has to be using the word ‘invisible’ in some sense peculiar to madmen.” And that's wrong isn't it?—the madman is mad precisely *because* he thinks that there are cows that are “invisible” in the everyday sense of the word.

The argument offered by the interlocutor in the preceding paragraph is an instance of an old fallacy—about sixty years old, I'd say. It's a bad piece of reasoning—not a bad piece of metaphysical reasoning, but a bad piece of reasoning about the way language works. The general form of the fallacy is this: ‘Certain philosophers say p ; ordinary speakers in similar circumstances wouldn't say p ; hence, the philosophers who say p are using words in senses that are not their ordinary senses.’¹¹

Consider the case at issue, the case in which p is ‘For any two chairs, there's something of which they're both parts’. If you ask “the man on the Clapham omnibus” whether there is anything of which the two chairs before him are both parts, and he says, “No,” it doesn't follow that the philosopher who says ‘For any two chairs, there's something of which they're both parts’ must be using the word ‘part’ in some technical sense, a sense other than the sense in which the word is used by passengers on the Clapham omnibus. Maybe the man on the Clapham omnibus believes, as I do, that there *are* no objects that have the features I've ascribed to x . Or maybe (a much more likely hypothesis) he's never considered the question. Or maybe he has considered the question and does believe that there are such objects, but very sensibly doesn't suppose that you mean to be talking about any such *outré* objects as those—maybe he takes it for granted that in the present conversation the domain of your and his quantifiers, as philosophers say, is restricted to objects of the sort people attend to in the ordinary business of life (a class of objects that does not contain fusions of chairs).¹² And it's quite clear that Kant, in offering his definition of ‘world’, does assume that there are objects like x —and many other “larger” objects of the same general sort; he is assuming, in fact, that, for any x s (or at least any x s in some very comprehensive domain) there is something that has those x s as parts *in the ordinary sense of ‘part’*. That's a metaphysical assumption, to be sure. But it's a metaphysical assumption that can be stated using only the ordinary word ‘part’—and without *misusing* the ordinary word ‘part’.¹³

Van Fraassen's earlier argument for the thesis that definitions of ‘world’ in terms of part must appeal to some technical sense of ‘part’ is therefore without merit. So, at least, someone who shares my views in the philosophy of language will

say. I'll consider his second argument—"She looks to mereology and notices . . ."—presently. Before I turn to that argument, however, I'll say something about what van Fraassen says about our ordinary use of the word 'world' (our use of the word in everyday discourse to say things that we think are important)—and he has a great deal to say on that topic. The burden of what he says is this: when we use 'world' in speaking of things we care about, we generally don't use it as a count-noun, and, on those occasions on which we do ("A world without wine simply wouldn't be worth living in"), that use is a mere rhetorical flourish that is of no philosophical interest. (If the wine-lover had said, "Without wine, life simply wouldn't be worth living," he would have expressed exactly the same thought—a thought to which no ontological thesis, no attempt to assign a referent with a determinate set of properties to 'the world', has any relevance whatever.)

I am willing to grant that a philosopher who treats the existence of "the world" as something that is metaphysically problematical is using the word 'world' in a sense that bears no interesting relation to any everyday use of the word. But let us ask this. Suppose that a certain philosopher, Phoebe, raises the question whether there is something of which everything is a part. Suppose, just for the moment, that van Fraassen is mistaken in thinking that a philosopher who raises this question must be using 'part' as a philosophical term of art. Suppose that it is a perfectly meaningful question whether there is some one thing of which everything is a part (in the everyday sense of 'part'—or in one of its everyday senses, for, of course, most everyday words have more than one everyday sense). If there is such an object, why should anyone protest if Phoebe refers to it as 'the world'? If it's a (meaningful but) open question whether there's such an object, why should anyone protest if Phoebe says, "One of the questions that interests me is whether there's such an object as the world—by which I mean something of which everything is a part?" I don't myself see any ground for such a protest. But if anyone does have scruples about using the word 'world' for that purpose, there are lots of other words and phrases that would serve equally well as names for an all-inclusive object. One could call it—among many other things—"the all-inclusive object" or 'the totality' or 'the sum of all things' or 'the universe' or 'the cosmos'.

'The world' is nevertheless not an obviously *bad* name for the all-inclusive object—even given (and this I grant) that the theses that one would ordinarily express by sentences like 'Everything in the world is in principle observable' and 'The world would be a better place if there were no suffering' are true (if they are true) or false (if they are false) quite independently of the question whether there is something of which everything is a part.¹⁴ Now it might not be a very interesting question whether there was such an object, whatever one might call it. But the question whether it is interesting is, I think, entirely independent of the question whether the existence of such an object bears any relation worth mentioning to the things we say when we use the phrase 'the world' in the ordinary business of life. For example—this example has been abstracted from several real episodes in the history of philosophy—, suppose that there is a school of philosophers who hold

that nothing exists without a cause; and suppose a critic says to them, “But what about the Totality of Things, the Most Inclusive Object. What’s the cause of *that*?” Our philosophers may very well want to say this in reply: “There is no such object as that; there is no object that has all objects as parts—or has all objects other than itself as proper parts. You have therefore not presented a counterexample to our thesis.” I am not saying that the dispute between these philosophers and their critic would be of interest to everyone, or even to most people (van Fraassen will say that it shouldn’t interest anyone). My only point is that some people *have* found the question whether there is a Most Inclusive Object interesting, and that the interest they have found in the question whether there is a Most Inclusive Object is wholly independent of whether that object is called a world and wholly independent of whether, when most people make assertions that contain the word ‘world’, the truth or falsity of what they say depends on the existence of a Most Inclusive Object.

Of course, words like ‘totality’ and ‘inclusive’ are themselves ordinary words. If the question whether there is a Totality of Things or a Most Inclusive Object is to be a meaningful question, and if ‘totality’ and ‘inclusive’ are to be understood in their ordinary senses, the object that answers to the titles ‘Totality of Things’ and ‘Most Inclusive Object’ must owe its existence to everything’s being bound together by some sort of totalizing relation, some relation of inclusion. And what could this relation be but the relation expressed by ‘part of’ in ordinary discourse? What could such an object be but an object of which everything is a part (in the everyday sense of ‘part’)? What indeed? But is the ordinary word ‘part’ up to the task? That question has not been answered.

Let us, then, leave the word ‘world’ and return to the word ‘part’, the ordinary English word ‘part’. Let us turn to van Fraassen’s second argument for the conclusion that philosophers who offer definitions of ‘world’ in terms of ‘part’ must be using ‘part’ in some sense other than its ordinary sense. One component of the argument—van Fraassen seems to regard it as an essential component—is an attempt to establish that, taken in its ordinary sense, ‘part of’ is not transitive. But why is the question of the transitivity or intransitivity of the ordinary ‘part of’ even relevant to the question whether a definition of ‘world’ in terms of ‘part’ requires some special, technical sense of ‘part’? One may well ask, since it does not follow from the intransitivity of ‘part of’ (in its ordinary sense) that there is no Most Inclusive Object, no object of which everything is a part (in the ordinary sense). Grant the following thesis for the sake of argument: taking ‘part’ in its ordinary sense, my left knee is a part of me, I am a part of the university faculty, my left knee is not a part of the university faculty. It does not follow from this thesis that nothing has my left knee, me, the university faculty, and everything else, as parts. (This is precisely why mereology has *two* axioms: the powerful creative or existential axiom *and* the humble but independent axiom ‘Parthood is transitive’.) It is therefore hard to see what role ‘The everyday part-whole relation is not transitive’ plays in the argument (the “Sparts-Sworlds-Ssums” argument) of which it seems to be a premise.

Perhaps the idea is this: if mereology does not represent the ordinary notion of parthood correctly in the simple matter of transitivity, why should we trust

mereology to get any aspect of ordinary parthood right? (Consider the fact that he says, “She looks to mereology and notices that in ordinary discourse the part-whole relation does not *even* seem to be transitive” [my italics].) But if this is the role ‘The everyday part-whole relation is not transitive’ plays in van Fraassen’s argument, it’s a very puzzling argument indeed. It’s puzzling because, by the nature of the case, there is no reason for those who want to know whether there’s a Most Inclusive Object, an object of which everything is a part, to trust mereology about anything. Not to *believe* it, at any rate. It’s just one theory among others about when sums¹⁵ exist (just one answer among others to what I have called the Special Composition Question). You certainly don’t have to trust mereology on any matter to regard the question whether there’s a Most Inclusive Object, a Biggest Thing, a Totality of Things, as meaningful. (If you do trust mereology, you will of course, say that the *answer* to this question is Yes; but those who say that the answer is No regard the question as as meaningful as those who say that the answer is Yes.) It seems, therefore, that the whole “Sparts-Sworlds-Ssums” argument fails to show that “the truly conscientious analytic philosopher” needs to decide whether to drop those initial sibilants—and fails to show why, however conscientious she may be, she should have bothered about them in the first place.

I will close by pointing out that, whatever van Fraassen’s attempt to show that “ordinary parthood” is intransitive was supposed to accomplish, it was a failure. The argument simply does not bear close scrutiny. The argument, of course, is essentially a proposed counterexample to the transitivity of the ordinary ‘part of’. Before we can evaluate this counterexample, we must first discover what it *is*. What is van Fraassen asking us to substitute for ‘x’, ‘y’, and ‘z’ in the open sentence

If *x* is a part of *y*, and *y* is a part of *z*, then *x* is a part of *z*?

The answer is not clear. If we say ‘our knees’, ‘we philosophers’, and ‘the university faculty’, we come up against the fact that ‘our knees’ and ‘we philosophers’ are not singular terms and are thus not syntactically possible substituends for the singular variables ‘x’ and ‘y’. I don’t think I’m misrepresenting van Fraassen’s argument in any important way if I reconstruct his proposed counterexample by replacing ‘our knees’ and ‘we philosophers’ with two singular terms that figured in an example in the last paragraph but one: ‘my left knee’ and ‘I’. (This is a reconstruction because van Fraassen is certainly thinking of certain philosophers *collectively* when he says “we philosophers are an important part of the university faculty.”) The reconstructed argument for the intransitivity of ordinary parthood is this: the statement

My left knee is a part of me, and I am a part of the university faculty,
and my left knee is a part of the university faculty.

is false. But this argument commits the fallacy of equivocation. One can “show,” by a parallel argument, an argument that depends in a similar way on equivocation, that the ordinary phrase ‘longer than’ expresses an intransitive relation.

I have on my desk three objects, two books and a letter opener. The books are called *The Viking Portable Nietzsche* and *Descartes: Philosophical Writings*. I offer the

following argument to show that in ordinary speech, ‘longer than’ expresses an intransitive relation:

- (1) *The Viking Portable Nietzsche* is longer than *Descartes: Philosophical Writings*
- (2) *Descartes: Philosophical Writings* is longer than the letter opener
- (3) *The Viking Portable Nietzsche* is not longer than the letter opener.¹⁶

If you ask me why I say these three statements are true, I defend them as follows.

Statement (1) is true because the length of *The Viking Portable Nietzsche* is 687 pages and the length of *Descartes: Philosophical Writings* is only 249 pages.

Statement (2) is true because the length of *Descartes: Philosophical Writings* is 23 cm., and the length of the letter opener is only 20 cm.

Statement (3) is true because the length of *The Viking Portable Nietzsche* is only 17 cm., and the length of the letter opener is 20 cm.

(An even simpler counterexample to the transitivity of ‘longer than’ would be this: *The Viking Portable Nietzsche* is longer than *Descartes: Philosophical Writings*; *Descartes: Philosophical Writings* is longer than *The Viking Portable Nietzsche*; *The Viking Portable Nietzsche* is not longer than *The Viking Portable Nietzsche*.) I don’t think that this argument is going to convince anyone that the ordinary phrase ‘longer than’ expresses an intransitive relation. And the fallacy in the argument is not far to seek: The phrase ‘longer than’ can be used to express more than one relation, and the argument depends on taking ‘longer than’ to express one of these relations in (1) and another of them in (2) and (3). The several relations expressed by ‘longer than’ no doubt collectively exhibit some sort of “unity of analogy” (whatever exactly that means), but they are nevertheless distinct relations, and the argument is therefore an instance of the fallacy of equivocation. But the many relations that ‘longer than’ can be used to express (relations defined on periods of time and on mathematical proofs are other examples) are *all* transitive.

And the same is true of ‘part of’ in ordinary English. It can be used to express many relations (defined on periods of time, regions of space, physical objects, symphonies, sets, real-valued functions . . .), but every single one of them is transitive. My reconstruction of van Fraassen’s “counterexample” to the transitivity of part-hood depends for such plausibility as it has on the fact that my left knee bears one of the relations expressed by ‘part of’ to me, and that I bear another of them to the university faculty—and, of course, my left knee does not bear that second relation to the university faculty. (One can cite linguistic evidence for this thesis, although it seems to me to be sufficiently evident to require no defense of any sort. For example, it would be much more natural to say that I’m a *member* of the university faculty than that I’m a *part* of it; and one would not say, in this century, that my left knee was one of my members unless one were indulging in deliberate archaism—as I did when I spoke of the members of a metaphorical gerrymander.) One upshot of this is that when our philosopher Phoebe speaks of an object of which everything is a part, she will do well to say which of the relations expressed by the ordi-

nary ‘part of’ she means to refer to. And, for all I have said, it may be that none of them will do for her purposes. That’s another question. These final remarks have only one point: In all its ordinary uses, ‘part of’ expresses some transitive relation or other.¹⁷

NOTES

1. New Haven and London: Yale University Press: 2000. All page citations in the present essay are to *The Empirical Stance*.
2. For example, van Fraassen says (p. 2) that in the Transcendental Dialectic, Kant “exposed the Illusions of Reason, the way in which reason overreaches itself in traditional metaphysics Here the unacknowledged presuppositions behind traditional metaphysics were brought to light through antinomies and paradoxes that this metaphysics was powerless to resolve.” I think that this is nonsense. (Nonsense in the way ‘Freud proved that all religious belief is illusory’ is nonsense; not in the way ‘The universe sequentially individualizes synthetic residues of porous variation’ is nonsense. It’s not that the statement is “not even false.” It’s that it *is* false, and, so I say, obviously false.) Kant simply *did not do* the thing van Fraassen says he did. Traditional metaphysics may indeed be an illusion—that’s not the part of van Fraassen’s statement that I’m calling nonsense—, but Kant’s arguments for the existence of the antinomies and paradoxes that van Fraassen alludes to are, where decipherable, logically inept and show nothing. So, at any rate, I say. (Even van Fraassen concedes that these arguments “were not faultless.” (2)) But leave aside the question whether I’m right in saying that what van Fraassen has said is nonsense. It will do for my purposes to point out that I think it’s *false*. That belief of mine raises a question: What could van Fraassen do to convince me or anyone that I was wrong and it wasn’t false? Could he look the statement up in the definitive *Compendium of the Truth-values of All Statements* and show me that it was to be found in the section called ‘The True Ones’? Could he point to various empirical predictions implied by the statement and proceed to demonstrate to me that these predictions had been borne out by experiment? No. If he could do it at all, he could do it only by philosophical argument, or perhaps by an appeal to intuition or insight, the very methods that metaphysicians use to try to change the minds of those who disagree with them about God, freedom, and immortality. And what is van Fraassen *risking* in making the statement? Only being wrong, surely? And, I would point out, if he is wrong, what could demonstrate conclusively, to everyone’s satisfaction, that he was wrong—short of God’s telling us that he was? (No danger of embarrassment there: if he is wrong, neither the God of the Philosophers nor the God of Abraham, Isaac, and Jacob is ever going to inform any of his readers of the fact.)
3. At this point there is a note that includes the following statement: “Because of [the very simplicity of the problem I shall choose,] it may be dismissed as a ‘don’t care.’ But of course I take it to be illustrative in that respect as well; I hold that [freedom and personal identity], as construed in analytic metaphysics, end up as don’t cares.”
4. If someone says, “A significant part of her fortune is in gold bullion,” and it transpires that *all* her fortune is in gold bullion, was what the speaker said false—or was it, strictly speaking, true, albeit not what the speaker would have said if he had known all the relevant facts (and had not been attempting to mislead his audience)? I don’t know.
5. Not even David Lewis, although he would say that Sonia had perfect duplicates that were “worlds” And not even the cartoon flea wearing the sandwich board with the legend, “The dog is coming to an end.” For, if the flea is a metaphysician and means to use ‘world’ as metaphysicians do (those who do use the word), he will want to say that he and his fellow fleas are parts of ‘the world’ but not parts of the dog.
6. But the alternative definition creates its own problems. Unlike the Kantian definition (if no two things are parts of each other, a world by the alternative definition is a world by the Kantian definition; and a “Kant world” is an “alternative-definition world” only if there is an alternative-definition world), it implies that there can be at most one world (unless it is possible for two objects

to have all the same parts—and thus to be parts of each other). If one wished so to use ‘world’ that there could be two or more worlds, one might wish to place some restriction on the quantifier ‘everything’. (David Lewis’s sense of ‘world’ is an example of this.) And one might wish to place some restriction on the quantifier ‘everything’ for another sort of reason: It is not clear that everyone who wants to use ‘world’ as a count-noun would want literally *everything* to be a part of a world. There may, for example, be metaphysicians who want to use the word ‘world’ as a count-noun and who believe in the existence of what Quine has called “abstract objects.” They may want to insist that a ‘world’ is a concrete (non-abstract) object and that a concrete object cannot have abstract objects as parts. They might want to say, therefore, that a “world” is a concrete object that has every concrete object as a part.

7. If she had said ‘A Sworld is, by definition, something that has everything as a Spart’, this would not have affected van Fraassen’s point.
8. This description of the “first decision” puzzles me. If by ‘the axioms of basic mereology’ van Fraassen meant the axioms of Lesniewski’s mereology, one of them *is* a very powerful existence postulate, a fact van Fraassen is fully aware of (see n. 11, 232). One might, of course, ask what it means to say that a relation “obeys” an existence postulate. (What does it mean to say that ‘older than’ “obeys” ‘Someone is older than everyone else?’) Mereology has essentially two axioms: Parthood is transitive; Any objects whatever (perhaps the quantifier is in some way restricted) have a unique mereological sum or fusion. It’s evident what it means to say that ‘Spart of’ “obeys” the first axiom: it means that it expresses a transitive relation. It’s not so clear what it means to say that it “obeys” the second. Perhaps it means this: “‘Spart of’ has the following feature: it expresses some relation x such that, for any ys , there exists a unique z such that the ys all bear x to z and, for every w that bears x to z , there exists a v such that (v is one of the ys and there exists a u such that u bears x to w and u bears x to v).” But, if so, why does van Fraassen speak of “adding” existence postulates?
9. Much as, according to van Fraassen, her colleagues in the philosophy of religion—those who tell us that ‘God’ means ‘the omniscient, omnipotent, omnibenevolent being’ or ‘the perfect being’ or ‘something a greater than which cannot be conceived’—offer us not the God of Abraham, Isaac, and Jacob, but a metaphysical simulacrum of that God.
10. To be boringly technical: an object x such that all the parts of the two chairs are parts of x and, moreover, such that all its parts overlap (share at least one part with) the parts of the chairs.
11. We might call this fallacy the “Postwar-Oxford Fallacy,” after a region of spacetime in which belief in the validity of inferences of this form was common. For a discussion of the Postwar-Oxford Fallacy (but not under that name) that is very much to the present point, see my paper “Naive Mereology, Admissible Valuations, and Other Matters,” *Noûs* 27 (1993): 229–34.
12. Following the passage quoted in the text, van Fraassen says, “A better response is open to [Kant]. He can point out that in this example I trade . . . on the context-sensitivity of our language. A moving company would count this chair as a part of the furniture . . . In one context it is a whole which is not a part, but in another context it is correctly called part of something else. This is a correct observation about our ordinary uses of the word ‘part.’ But . . . Kant then needs to refine his notion of ‘world’ [for] it would not suit his purpose to say that in some contexts a chair is one of many worlds. [He must therefore] remove such context dependence. [He must find] a single context, in which everything short of all there is counts as part of something else . . . a God’s-eye context.” Here van Fraassen seems to be in danger of losing sight of the question that is in dispute: Must the philosopher who defines ‘world’ in terms of ‘part’ be using ‘part’ in some special, technical sense? If the words I have just quoted are to be relevant to that question, the “moving company” example must show that the *meaning* of ‘part’ is context-dependent. (It’s not clear to me what the example *is* supposed to show—owing to the vagueness of phrases like ‘count as’ and ‘correctly call!’) But it shows no such thing. It is simply an illustration of a familiar and uncontroversial fact about the effects of context on what is expressed by sentences, to wit that the domains of the quantifiers that occur in those sentences may be (and generally are) determined by context. The Clapham-omnibus passenger may possibly be induced to say, “The chair is not a part of anything” (if a non-philosopher says anything like that, it can only be because he’s being prodded by a philosopher). The mover may well say, “The chair is a part of the load of furniture.” If they do say these things, they are not using ‘part’ in different senses, senses determined by the contexts of

- their respective utterances. No, they're both using 'part' in the same sense; what's determined by context is *what things* the two of them take to be relevant to the truth-values of their respective assertions. Compare this case. A says, "Nothing is taller than a giraffe." B says, "That tree is taller than any giraffe." Depending on the contexts in which A and B speak, what each says may well be true—since it may well be that the context in which A speaks restricts her domain of quantification to animals, and the context in which B speaks does not so restrict *his* domain of quantification. This thesis is consistent with the statement that A and B were using 'taller than' in the same sense. And that is fortunate for the thesis, for A and B *were* using 'taller than' in the same sense.
13. Move some chairs into an empty room (empty of everything but air and water vapor and dust motes). A metaphysician who believes in fusions of chairs looks into the room into which you have moved the chairs and, because he believes in fusions of chairs and for no other reason (he is not, for example, hallucinating), says, "There's something in the room whose volume exceeds the volume of any of the chairs in the room." That's a metaphysical assertion. (At any rate, it's an assertion made for metaphysical reasons. I suppose that someone who spoke the same words in the same external circumstances because he was under the illusion that there was an elephant in the room would be making the same assertion for non-metaphysical reasons.) In making this assertion, is he using some word or phrase in some sense other than its normal sense? What would that word or phrase be?
 14. 'World' is an even better name for "highly inclusive objects" if those objects are of a kind that can have many members—if there can "a plurality of worlds" (see n. 6), as in the writings of David Lewis and C. S. Lewis. Van Fraassen in fact discusses the use of 'world' in *The Lion, the Witch and the Wardrobe* and dismisses it as irrelevant to metaphysical questions in which 'world' occurs as a count-noun in these curious words: "... worlds can be something like mythical regions . . . It is among the purported regions of reality magically accessible to us that I think we should locate the worlds discussed in . . . C. S. Lewis's *The Lion, the Witch and the Wardrobe*." (21). Nothing could be further from the truth. That the "worlds" that figure in the works of the two Lewises (in David Kellogg's writings on the metaphysics of modality and in Clive Staples's fairytales for children) are things of much the same sort is shown by the following passage from *The Magician's Nephew*:

[By 'another world'] I don't mean another planet, you know; they're part of our world and you could get to them if you went far enough—but a really Other World—another Nature—another universe—somewhere you would never reach even if you traveled through the space of this universe for ever and ever—a world that could be reached only by Magic . . .

(One should note, in connection with this passage, that "in the fiction" magic is a real thing, as real—and real in the same sense of 'real'—as gravity or electricity. The other worlds to which Lewis's characters travel by magic are "in the fiction" as real as our own, and real in the same sense. In *Alice in Wonderland*, "it was all a dream"; not so in the Narnia books.) I say "things of much the same sort" because the two Lewises differ on two points concerning "worlds." First, according to David Lewis, interworldly travel is impossible even by magic (if there *were* such a thing as magic, even *it* wouldn't be able to get you to another David Lewis-world). Secondly, although the worlds that figure in the Narnia books (it's made clear that in addition to our world and the two other worlds that are visited by Lewis's characters, there are many, many more) are variegated indeed, there is no evidence that C. S. Lewis intended anything resembling David Lewis's plenitude-generating Principle of Recombination to be "true in the fiction."
 15. And I mean 'sums', not 'Ssums'. A sum of the *x*s is a thing that has all the *x*s as parts (in the ordinary sense of 'part') and each of whose parts (ordinary sense) overlaps [shares a part (ordinary sense) with] at least one of the *x*s.
 16. Both the books that figure in this argument are considerably longer than they are wide, more so than is the case with most books. Each, therefore, clearly has a length of the kind that is measured in centimeters.
 17. Although I am convinced that 'part of' expresses many different relations and have made my point in terms of this conviction, I want to note that van Fraassen's argument is fallacious even if I am wrong about this and 'part of' always expresses the same relation. Suppose for the sake of argument that, e.g., a movement is a part of a symphony in the same sense of 'part of' in which a tail is a part of a cat. Van Fraassen's counterexample to the transitivity of the parthood relation—as I

have revised it—is this: my left knee is a part of me; I am a part of the university faculty; my left knee is not a part of the university faculty. Suppose my left knee is a part of me. Then I am not a part of the faculty, since I do not bear the relation of “part of” to the faculty—not if it’s the relation that my left knee bears to me. If there really is such a thing as the university faculty (if ‘the university faculty’ is not a disguised plural-referring expression), it must be a collection of people (something like a set), and the relation I bear to it must be the relation that one of the things a collection comprises bears to the collection (something like set membership). But a member of a set or collection is not one of its parts. (If a set has parts, they can only be its subsets.) Van Fraassen’s counterexample to the transitivity of parthood is therefore no better than this one:

Tibbles’s tail is a part of Tibbles; Tibbles is a part of the set of cats; Tibbles’s tail is not a part of the set of cats.

If someone said, “Tibbles is a part of the set of cats,” we might charitably count that as true—might, in our charity, interpret this person’s words ‘is a part of’ as meaning ‘is a member of’. (Even if there’s only one relation of parthood, people may sometimes use ‘part of’ loosely, use it to express various relations that—loosely—resemble the parthood relation.) But if ‘part of’ expresses, as we are supposing, one relation, we can’t make ‘Tibbles’s tail is a part of Tibbles’ ‘Tibbles is a part of the set of cats’ both “come out true” if the words ‘part of’ in the two sentences both express that one relation. I don’t deny that we can ascribe a sense to ‘part of’ such that both sentences are true if ‘part of’ is interpreted as having that sense in both sentences: ‘is not identical with’, for example, or ‘is either a part or a member of’. (The proposed counterexample *is* a counterexample to the transitivity of “is either a part or a member of.”) My position is that we can’t find a sense of ‘part of’ that would have that consequence and which was a sense that anyone would suppose really *was* the meaning of ‘part of’—of the phrase that expresses the one relation of parthood.