# Chapter 12 What Could Vague Objects Possibly Be?

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Nothing. Or at least, this is what some prominent defenders of alternative conceptions of the nature of vagueness seem to hold:

The only intelligible account of vagueness locates it in our thought and language. The reason it's vague where the outback begins is not that there's this thing, the outback, with imprecise borders; rather there are many things, with different borders, and nobody has been fool enough to try to enforce a choice of one of them as the official referent of the word 'outback.' Vagueness is semantic indecision. (Lewis 1986, 213)

According to the view of vagueness as semantic indecision, whatever it is that in the thoughts, experiences, and practices of language users determines the meaning of vague expressions, it fails to determine any one single entity as referent from a given range of equally natural ("precise") candidates. According to a view where there is vagueness in rebus, by contrast, some objects can themselves be vague. And this is the view that is often accused of lacking appropriate motivation—and even intelligibility:

[The dualism] of vague objects and their precisifications is unparsimonious and unnecessary... Semantic indecision will suffice to explain the phenomenon of vagueness. We need no vague objects. Further, I doubt that I have any correct conception of a vague object. (Lewis 1993, 27)

In recent work, Elizabeth Barnes and Robbie Williams (Barnes 2010; Barnes and Williams 2011a; Williams 2008 *inter alia*) have attempted to vindicate the

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intelligibility of the notion and to provide a conception of what vague objects could possibly be.<sup>1</sup>

The most salient objection to the possibility of vague objects is Evans's. Suppose that there being vagueness in rebus requires that there be indeterminate identity statements whose indeterminacy does not result from semantic indecision in any of the constituent expressions. Then Evans's infamous argument (1978) seems to show that the view would in fact be contradictory, provided that substantial— controversial, plausible—background assumptions are made. Most responses take one of the following forms: to deny that ontic vagueness requires that there be relevant indeterminate identity statements or to reject some of the background assumptions needed for Evans's argument to go through. Williams (2008) claims that even if all these assumptions are in place, one can resist the argument by exploiting the indeterminacy in reference that some expressions may exhibit due to ontic vagueness as opposed to semantic indecision.

In what follows I argue that negative characterizations of vague objects such as Barnes's (2010) are satisfactory in so far as they go, but precisely due to their negative nature, they do not suffice to vindicate the intelligibility of the notion characterized (Sect. 12.1). Furthermore, and following Eklund (2011), I argue that the arguments of Barnes and Williams (2011a) do not advance the dialectical situation with respect to this (Sect. 12.2), and I offer some reasons to find their rejoinder (Barnes and Williams 2011b) wanting (Sect. 12.3).

In the second half of the chapter, I summarize Evans's argument and its significance (Sect. 12.4). I then voice some concerns about the particular response offered by Williams (2008) (Sect. 12.5), and I explore a more general worry in connection with the discussion in Barnes and Williams (2009) (Sect. 12.6).

I conclude that those initially sympathetic to the traditional misgivings regarding the intelligibility of the notion should remain unmoved: there still seems to be nothing that vague objects could possibly be.

#### **12.1** Negative Characterizations of Ontic Vagueness

According to the view of vagueness as semantic indecision, the source of the vagueness in statements involving the outback is the semantic indeterminacy of the word "outback" between various, equally natural, "precise" candidate referents.

What could it possibly be for *the outback itself* to be vague? One natural, straightforward thought seems to be: for the vagueness in some of the statements in

<sup>&</sup>lt;sup>1</sup>A note on terminology. I will be focusing on the issue concerning vague objects and will accordingly speak of *ontic* vagueness and vagueness *in rebus*. Arguably, the issue of *metaphysical* vagueness might be more general, if the vagueness in question could have other metaphysical sources. Also, I will be taking *vagueness* to be a particular variety of the more general phenomenon of *indeterminacy*, characteristically manifested in sorites-susceptibility. See below for further discussion concerning ontic vagueness vs. metaphysical indeterminacy.

question *not* to have its source in such semantic indecision, but rather in something *else*—"the outback itself."

Suitably generalized, this seems to constitute a common working characterization of ontic vagueness: vagueness that does *not* issue from semantic indecision.<sup>2</sup>

Consider Katherine Hawley's:

When I say that the indeterminacy of some utterance is ontic I will mean that the indeterminacy is not a consequence of semantic indecision in the component terms of the utterance. (Hawley 2001, 105)

This is, in essence, very similar to the proposal advanced by Barnes herself:

Sentence S is ontically vague iff: were all representational content precisified, there is an admissible precisification of S such that according to that precisification the sentence would still be non-epistemically indeterminate in a way that is Sorites-susceptible. (Barnes 2010, 604)<sup>3</sup>

As Hawley and Barnes would themselves admit, these are just *negative* characterizations of vagueness in rebus. That doesn't make them unsuitable as characterizations, of course. But by themselves they don't suffice to demonstrate the intelligibility of the notion to those who doubt there is something vague objects could possibly be.

To illustrate, consider the following. Suppose one is (reasonably) skeptical as to whether the notion of a married bachelor is ultimately intelligible. In order to nonetheless discuss this notion, the following negative characterization might well do as a working definition:

A man is a married bachelor iff he is a bachelor but not unmarried.

But adequate as this definition may be for the stated purpose, it quite clearly does not suffice to vindicate the intelligibility of the notion characterized. If one lacked any coherent notion of a married bachelor—as one certainly should—such a negative characterization would not provide one. There is nothing that a married bachelor could possibly be—the notion of a married bachelor is ultimately unintelligible, even given an appropriate negative characterization.

Likewise for the case at hand. The charge leveled by skeptics like Lewis against the intelligibility of ontic vagueness seems to be of precisely the same nature. Perhaps there is a deflated sense of understanding in which one can understand what it would be for an object to be vague, just as one can understand what it would be for a bachelor to be married. After all, "There are vague objects" and "There are married bachelors" are relevantly different from "There are xajsoif achndwxadw" and "There are slithy toves." This is arguably related to the availability of negative characterizations of the sort under consideration. But there is also clearly a

<sup>&</sup>lt;sup>2</sup>Nor from (vagueness-characteristic) ignorance. See discussion below.

<sup>&</sup>lt;sup>3</sup>Barnes (2010, fn. 25) suggests that her proposal improves on Hawley's by allowing "for the possibility of 'mixed cases'—cases where the vagueness in question is, e.g., a mixture of semantic and ontic." As I see it, Hawley's proposal can be read, or reinterpreted, as offering a characterization of what it would be for vagueness to be *at least partly* ontic.

sense in which the notion of a married bachelor nonetheless remains ultimately unintelligible. And this is the sense in which skeptics like Lewis contend—as I read them—that the notion of a vague object is also ultimately unintelligible. Thus, the existence of appropriate negative characterizations of vagueness in rebus is compatible with the notion lacking ultimate intelligibility.

As indicated, this much seems to be common ground, since neither Hawley nor Barnes suggests otherwise. Indeed, Barnes and Williams explicitly concede this point:

The definition [of (Barnes 2010)] isn't meant to make sense of metaphysical vagueness or render it 'kosher'—you can agree that the definition is extensionally adequate while still being strongly skeptical about the very idea of metaphysical vagueness. (Barnes and Williams 2011b, fn. 8)

Thus, negative characterizations of ontic vagueness, adequate as they may be for certain purposes, do not suffice per se to vindicate the intelligibility of the notion.

# 12.2 Ontic Vagueness Versus "Metaphysical Ambiguity"

On the face of it, however, the very same point seems to apply to the characterization offered by Barnes and Williams themselves—contrary, this time, to what they *do* seem to suggest:

One common complaint among those sceptical of metaphysical indeterminacy is that they cannot *understand* the notion, or that they suspect it *makes no sense*... [We] argue that our opponents *can* make sense of what we're saying... All parties should admit that they have a grasp on a generic notion of indefiniteness (and related notions) as deployed in ordinary speech, and used informally in philosophy. This generic concept of indefiniteness is arguably all one needs to have a working understanding of our target notion. In particular, using it we can formulate the following biconditional:

it is metaphysically indeterminate whether p iff (1) it is indefinite whether p, and (2) the source of this indefiniteness is the non-representational world. (Barnes and Williams 2011a, 108)

It is not immediately obvious how this is supposed to relevantly differ from the previous sort of characterization. In the parody case, people certainly have a grasp of a generic concept of bachelorhood (and related notions) as deployed in ordinary speech, which can be involved in a negative characterization of the notion of a married bachelor along the lines suggested. As alluded to, perhaps there is an attenuated sense of understanding in which we can understand the characterized notion, but there is also a clear sense in which it is ultimately unintelligible. More to the point, all parties should indeed admit that they have a grasp of a generic notion of indefiniteness (and related notions) as deployed in ordinary speech and used informally in philosophy. But as we have just seen, negative characterizations of metaphysical vagueness, such as those submitted by Hawley and Barnes, do not suffice to demonstrate the intelligibility of this notion to those skeptical of it—as

Barnes and Williams themselves explicitly admit. So how is Barnes and Williams's proposal supposed to be relevantly different?

That it is *not* relevantly different is, in my view, forcefully argued by Matti Eklund via the following analogy—the inspiration for my example of married bachelors:

[(Barnes and Williams 2011a)] argue that we possess a generic notion of indeterminacy ... Metaphysical indeterminacy is then just indeterminacy with a metaphysical source, and hence is neither semantic nor epistemic. Perhaps a way to represent Barnes and Williams's stance is: "What part of metaphysically indeterminate don't you understand? Surely you understand 'indeterminate,' for you have a generic notion of indeterminacy. And surely you understand what it is for the source of a phenomenon to be metaphysical."

But suppose a theorist—BW\*—proposes that the world is *metaphysically ambiguous* (or *metaphysically context-sensitive*, etc.). When, bewildered, we ask what that is supposed to mean, BW\* defends the intelligibility of metaphysical ambiguity by saying that surely we know what it is for something to be ambiguous and surely we know what it is for the source of a phenomenon to be metaphysical. So—what part of metaphysical ambiguity don't we understand? BW\*'s defense of his idea shouldn't convince. Why should we be any more convinced by what Barnes and Williams say? (Eklund 2011, 152)

There is indeed a sense in which all parties should admit, as Barnes and Williams contend, that they have a grasp of a generic notion of indefiniteness (and related notions) as deployed in ordinary speech and used informally in philosophy. In that sense, clearly people also have a grasp of generic notions of ambiguity and context-sensitivity (and related notions) as deployed in ordinary speech and used informally in philosophy. Now, ambiguity and context-sensitivity are clearly semantic phenomena and have their sources in features of representational reality. One can negatively characterize a notion via one of these generic notions and contend that its subject has a different, metaphysical source, in the envisaged manner. But appropriate as this may be for some purposes, it would fail to vindicate the ultimate intelligibility of the notion negatively characterized in this way—be that the notion of metaphysical ambiguity or metaphysical context-sensitivity. Saying that metaphysical ambiguity is ambiguity with a metaphysical as opposed to a semantic source may be good enough in so far as it goes, but ultimately it fails to make sense of what it would be for things to be metaphysically ambiguous.

Likewise, again, for the case at hand. According to skeptics such as Lewis—as I read them—vagueness is a semantic phenomenon in exactly the same sense in which ambiguity and context-sensitivity are. Hence the charge that ontic vagueness is ultimately unintelligible. Saying that metaphysical vagueness is vagueness with a metaphysical as opposed to a semantic source may be good enough in so far as it goes—but ultimately it fails to make sense of what it would be for things to be metaphysically vague.

## **12.3** Ontic Vagueness Versus Metaphysical Indeterminacy

In their rejoinder to Eklund, Barnes and Williams seem to agree that there should be something in their proposal to relevantly distinguish it from Eklund's parody:

surely if our defense allows you to make sense of metaphysical ambiguity then something's gone wrong. (Barnes and Williams 2011b, 175)

But what would this be? In other words, why would Barnes and Williams think that their (2011a) proposal succeeds as an intelligibility-vindicating project while the similar-sounding one of Barnes (2010), as they admit, would not?

I think that the key to answering this is hinted at in a remark they make almost in passing:

Here is one [model out of many that could be provided for the relationship between the generic concept and the more specific ones] we find congenial: we should characterize generic indefiniteness via its conceptual or functional role, consisting perhaps of the characteristic attitudes and hedged responses that indefiniteness prompts. Anything that fulfills this conceptual role will (prima facie) count as a case of indefiniteness. But, like any role-functional concept, it's open that the concept can be multiply realized. (Barnes and Williams 2011a, 110)

Now, if a given generic concept is "functional" in the relevant sense, and allows for "multiple realization" in the relevant sense, then arguably negatively characterizing a notion by claiming that it is "realized" some way different from another will go at least some way towards vindicating its intelligibility. Such multiple realizability is absent in the contrast cases of married bachelors and metaphysical ambiguity.<sup>4</sup> And the claim that the generic concept of indefiniteness (or any similar concept) is multiply realizable was absent from the merely negative characterizations that, as conceded, didn't suffice to vindicate the intelligibility of metaphysical vagueness. Thus, I take it, this may turn out to be the crucial feature which according to Barnes and Williams makes their proposal suitably different—in which case the envisaged model is not only one that they find "congenial" but rather one they are actually committed to, if their proposal is to improve on the previous negative characterizations in the respect that concerns us here.<sup>5</sup>

Thus *if* vagueness were like this—a phenomenon that could in principle occur in ways other than as a result of semantic indecision—*then* the envisaged negative characterization would have some claim to vindicate the intelligibility of ontic vagueness, after all.

Now, should we believe that vagueness is indeed like this? Some may think that we should—as witnessed by the availability (and, in certain circles, even popularity) of views about the nature of vagueness alternative to that of vagueness as semantic indecision—notably, *epistemicism*. However, I think otherwise, for at least the following two reasons.

First, as argued by Eklund, it is controversial, in a sense that clearly matters for the present point, whether epistemicism actually accounts for what we took to be

<sup>&</sup>lt;sup>4</sup>This is compatible with there being a sense in which (generic) ambiguity can be syntactically or lexically "realized."

<sup>&</sup>lt;sup>5</sup>The accuracy of this attribution is perhaps reinforced by their remark: "*so long as* something along these lines ultimately works, our use of the generic notion in characterizing [metaphysical indeterminacy] will be legitimate" (2011a, 110, my emphasis).

the relevant phenomenon, rather than attempting to explain appearances away by invoking a certain characteristic *alternative*, epistemic phenomenon:

it is far from obvious that the notion of epistemic indeterminacy is in good standing, or that it is another species of the genus indeterminacy. To be sure, epistemicists writing about vagueness tend to argue that they do not deny that vagueness is bound up with indeterminacy, but rather only understand the indeterminacy to be epistemic in nature, a matter of ignorance. But despite the epistemicists' protests, one may well think that what the epistemicist view really involves is that what we mistake for genuine indeterminacy is merely a certain kind of ignorance. If so, Barnes and Williams aren't better off than BW\* is: in each case we have a phenomenon whose uncontroversial instances are semantic, and someone who claims that the phenomenon also has 'metaphysical' instances.<sup>6</sup> (Eklund 2011, 153)

Second, and as also argued by Eklund, the charge of unintelligibility leveled by skeptics such as Lewis concerns specifically ontic *vagueness*, as opposed to the more general case of metaphysical *indeterminacy*. Clearly indeterminacy is a more general phenomenon than that of vagueness—the latter characteristically manifested in *soriticality*—as witnessed by the arguable indeterminacy of "mass," " $\sqrt{-1}$ ," and the continuum hypothesis.<sup>7</sup> Maybe some issues concerning quantum physics or the open future provide reasons to think that some indeterminacy has a metaphysical source. But what skeptics such as Lewis contend is that the only intelligible account *of the indeterminacy that is vagueness* locates it in our thought and language. With respect to vagueness, the suggestion that we have a grasp of the notion ultimately independent of semantic indecision seems to be, the skeptic would claim, in no better standing than the corresponding suggestions concerning ambiguity and context-sensitivity.

With this in mind, let's consider Barnes and Williams's (2011b) rejoinder, with "vagueness" substituted for "indeterminacy":

[E]ven if it turned out that, in fact, all [vagueness] is semantic indecision, we'd still have a generic *concept* of [vagueness]. We'd have this generic concept unless it turned out that it's *analytic* of [vagueness] that all [vagueness] is semantic indecision. That [vagueness] is *analytically* semantic seems much less plausible than the (still controversial) claim that all [vagueness] is semantic. (Barnes and Williams 2011b, 174)

<sup>&</sup>lt;sup>6</sup>Barnes and Williams seem partly sensitive to some such possible misgivings and offer to accommodate them terminologically by reserving *indeterminacy* for the non-epistemic instances of a more general phenomenon of *indefiniteness*. Given this stipulation, it is certainly the case that epistemicism offers an account of indefiniteness, if not of indeterminacy. But due to the controversy just alluded to, it is controversial that the general phenomenon is not, after all, *disjunctive* in nature—see Eklund (2011, 153–4). (Alternatively, if one insists that "indefiniteness" is stipulated to stand for the "pre-theoretic," nondisjunctive phenomenon that is present in cases of semantic indecision (Barnes and Williams 2011b, 174–5), then the controversy does not allow one just to assume that there is epistemic indefiniteness proper, as opposed to characteristically epistemic alternative phenomena.)

<sup>&</sup>lt;sup>7</sup>Vagueness can be characteristically manifested in soriticality even if some expressions turn out to be vague but not relevantly soritical: see Weatherson's "few children for an academic," or cases of nondegree combinatorial vagueness.

Now, there might be a sense in which it is "controversial" that all vagueness is semantic and perhaps even more so that this is "analytically" so—after all, there are competent philosophers who deny it. But this doesn't seem to matter for the present point. Barnes and Williams seem to concede this, as they add in a footnote:

That [vagueness] isn't obviously semantic doesn't *rule out* its being analytically semantic (assuming that there can be non-obvious necessities)... (2011b, fn. 3)

But they continue:

 $\ldots$  but an argument is required for why we should posit such non-obvious analyticity. (2011b, fn. 3)

On the face of it, however, this just seems to get the dialectical structure back to front—leaving aside epistemological worries about nonobvious analyticity. For remember that the task Barnes and Williams set themselves, as quoted above, is to *argue* that their opponents "can make sense" of the notion of ontic vagueness. But the latter remark amounts to a request that *the skeptics* justify their position. Barnes and Williams echo Lewis's point that

any competent philosopher who does not understand something will take care not to understand anything else whereby it might be explained. (Lewis 1986, 203, fn. 5)

But crucially, in the present case nothing *else* whereby the notion might be explained has been provided yet. Rather, Barnes and Williams's rejoinder consists in the claim that *if* the skeptics' reasons for their skepticism turn out to be misguided, *then* we would have the materials for turning a negative characterization into something that could be used to vindicate the intelligibility of the characterized notion. Fair enough. But this point is quite dialectically ineffective against the skeptics themselves, I daresay.

#### **12.4** Evans Against Indeterminate Identity

As I said, the most salient objection against the possibility of vague objects is Evans's. In a recent paper, Williams (2008) argues that even if the two main sets of assumptions are in place—concerning the significance of indeterminate identity vis-à-vis the issue as to whether there could be vague objects, and the underlying logic—one can resist the argument by exploiting the indeterminacy in reference that some expressions may exhibit due to ontic vagueness as opposed to semantic indecision.<sup>8</sup>

Evans suggested that vagueness in rebus would require that there be relevant indeterminate identity statements. This is why his argument against the latter bears on the issue of whether there could be vague objects.

<sup>&</sup>lt;sup>8</sup>See Barnes (2009) for her own alternative, counterpart-theoretic response to Evans.

Sometimes people have contended that there may be ways for objects to be vague other than by figuring somehow in relevant indeterminate identity statements. Maybe vagueness in rebus consists in its being "metaphysically" indeterminate whether a given object instantiates a given property, or in its being "metaphysically" indeterminate whether the object exists, or in its being "metaphysically" indeterminate whether it has another given object as a part.

As Williams observes, however, there seem to be powerful arguments that these cases of metaphysical indeterminacy lead to indeterminacy in identity statements, provided again that substantial—controversial, plausible—background assumptions are also made, notably classical logic and extensional mereology.

Suppose, for instance, that it is indeterminate whether object *a* instantiates property *F*. Then it seems it would also be indeterminate whether the state of affairs of *a*'s being *F* exists, or whether universal *F* itself exists, if *a* is the only candidate instance (adapted from Barnes 2005). Or suppose that it is indeterminate whether something *a* exists, and let *b* be the fusion of everything whatsoever and *c* be the fusion of everything whatsoever that is not identical to *a*. Then it seems it would be indeterminate whether *b* is identical to *c* (adapted from Hawley 2002). So indeterminacy in instantiation seems to lead to indeterminacy in existence, and indeterminacy in existence seems to lead to indeterminacy in identity statements. Or suppose it is indeterminate whether *a* has *c* as part, and let a + c be the sum of *a* and *c*. Then it seems it would be indeterminate whether *a* is identical to a + c(adapted from Weatherson 2003). So indeterminacy in parthood seems to lead to indeterminacy in identity statements.

Maybe one can resist these arguments, but it is not clear exactly how. In any case, there seems to be something going for the claim that vagueness in rebus requires indeterminate identity statements whose indeterminacy does not result from semantic indecision in any of the constituent expressions.

But there is a well-known difficulty in allowing for indeterminacy in such statements. As Williams aptly puts it, the core of Evans's argument against indeterminate identity statements is "disarming in its simplicity" (2008, 135):

- (1) It is indeterminate whether a is identical to b.
- (2) a has the property of being indeterminately identical to b.
- (3) It is not indeterminate whether b is identical to b.
- (4) b does not have the property of being indeterminately identical to b.
- (5) Therefore, a is not identical to b.

(3) is taken to be self-evident, from (1) to (2) is property abstraction, from (3) to (4) is either a "generalized" form thereof or the contrapositive of property instantiation, and from (2) and (4) to (5) is the contrapositive of the indiscernibility of identicals.

As subsequent discussion has made clear (Noonan 1982; Lewis 1988), for the argument to go through, "a" and "b" must be determinate in reference. Otherwise, the step from (1) to (2) or from (3) to (4) would be blocked. This is why the argument allows for indeterminate identity *statements*, provided that some of the expressions are indeterminate in reference.

(Consider the following analogy:

- (1') It is contingent that a is identical to b.
- (2') a has the property of being contingently identical to b.
- (3') It is not contingent whether b is identical to b.
- (4') b does not have the property of being contingently identical to b.
- (5') Therefore, a is not identical to b.

For the argument to go through, "a" and "b" must be rigid. Otherwise, the step from (1') to (2') or from (3') to (4') would be blocked. That is why the argument allows for contingent identity statements, provided that some of the expressions are flexible.)

As Williams remarks, there are a number of substantial assumptions in the background, notably, classical logic; the legitimacy of ("abundant") property talk (or at least, of plural readings thereof along the lines of "a is one of the things that are indeterminately identical with b"); the indiscernibility of identicals; and, if a contradiction is to be derived, that if something is indeterminate, then it is determinate that it is indeterminate. Most responses to Evans's argument reject some of these. Williams's main point is that the argument can be resisted *even if one grants* all these other assumptions.

## **12.5** Semantic Indecision Versus Indeterminate Reference?

Vagueness in rebus requires indeterminate identity statements whose indeterminacy does not result from *semantic indecision* in any of the constituent expressions (or so we can assume). Evans's argument allows for indeterminate identity statements, provided that some of the constituent expressions are *indeterminate in reference*. What if the indeterminacy in reference of an expression could have a source other than semantic indecision? Williams's response to Evans consists in attempting to exploit a mismatch between these two notions:

The stock examples of referentially indeterminate words ('mass,' 'the square root of minus one' and 'Kilimanjaro') are presented as cases where our reference-fixing procedures fail to isolate one amongst a range of candidate referents. Perhaps, even, there is some obstacle in principle to our doing so. These are cases of referential indeterminacy *in virtue of* semantic indecision.

A different kind of case is possible. These are where as language-users we have done our part of the task, but because of worldly indeterminacy, we do not secure a determinate referent. (2008, 147)

The framework provided by Williams is this. Assume ersatzism about possible worlds, and let them be maximal precise world-properties:

If reality is vague, then presumably it is vague which precise world property is instantiated. I shall define 'w corresponds to reality' as 'w is not determinately uninstantiated,' and I shall say that the world is an *actuality* when it corresponds to reality in this sense... Given all this, ontic indeterminacy surfaces in *multiple worlds' being actual* ... A sentence will be true (*simpliciter*) if and only if it is true relative to all the actual worlds. (2008, 149)

According to Williams, this ontic indeterminacy gives rise to a kind of referential indeterminacy that protects indeterminate identity statements from Evans's result:

Suppose a particular amoeba, Sue, splits into two 'daughter' amoebas, Sally and Sandy. After the fission, Sally wanders off to the west and Sandy to the east. What I shall defend is a description of the fission as one where

- (i) Sue survives past the fission.
- (ii) It is indeterminate whether Sue survives as Sally or as Sandy.
- (iii) This indeterminacy is a matter of ontic unsettledness, rather than of semantic indecision or epistemic limitations.

Two relevant candidates to 'correspond' with [reality], therefore, are

- (a) a world where Sue survives as the amoeba who wanders off to the west after the fission (i.e., Sue survives under the name 'Sandy'); a new, distinct amoeba, Sally, is created at the fission and wanders off to the east.
- (b) a world where Sue survives as the amoeba who wanders off to the east after the fission (i.e., Sue survives under the name 'Sally'); a new, distinct amoeba, Sandy, is created at the fission and wanders off to the west.

... The name 'Sue' suffers no referential indeterminacy. In each case, it refers to the surviving amoeba... Metaphysically, I am supposing that it is indeterminate where the surviving amoeba Sue is after the fission. Since I have introduced the names 'Sandy' and 'Sally' (in part) by pointing to an amoeba at a certain location, this ontic indeterminacy *induces* referential indeterminacy. The (ontologically based) referential indeterminacy produces a vague identity statement. 'Sue = Sandy' is true at one actual world, but false at another. So, overall, it is indeterminate in status. (2008, 151)

As presented, Williams's multiple actualities should be among other people's possible worlds. As such, they should be "metaphysically admissible," as it were. Let me explain. Suppose (as seems to me most plausible) that amoebas cannot survive fission—so that, in particular, Sue dies in the process of begetting two numerically distinct daughters: Sally, who wanders off to the west, and Sandy, who wanders off to the east. If amoebas are like this, then all the expressions are plausibly determinate in reference, and all (nontrivial) identity statements determinate in status (and false).

This is why in my view the example might not be the most felicitous. But never mind that: other entities do seem to have persistence conditions that allow for fission. Let's just assume amoebas are like them. On this assumption, it seems to me, the two scenarios considered still fall short of being possible worlds and, therefore, they cannot be "multiple actualities" in Williams's sense. For most plausibly, or so it seems to me, if amoebas could survive fission, then, in each case, all the daughters would be surviving amoebas—so "the" mother turns out to be several overlapping amoebas. How this should be described in more detail will depend on one's views on how things persist.<sup>9</sup> Maybe we have two temporally overlapping perduring worms. Or if amoebas survive fission and endure, then maybe we have two series of "mereologically essentialist" enduring *entia successiva* sharing coordinates prior to fission. Or maybe we have two enduring living organisms sharing the matter that constitutes them prior to fission. Or … In each case, there are two surviving amoebas. Given that "Sally" is stipulated to refer to the amoeba who wanders off to the west after the fission and "Sandy" the one who wanders off to the east, both expressions seem to be determinate in reference after all. What about "Sue"? Most plausibly, it seems to me, and assuming survival, "Sue" exhibits semantic indecision between Sally and Sandy, so we would not have a case that satisfies the description given by (i)–(iii) above.

Suppose, however, that we were told that "Sue" determinately refers to a vague object and that it is "metaphysically unsettled" whether this is Sally or Sandy. Now, one would think, the two "precise" overlapping things also exist—for more on this, see the discussion below. I have suggested that these are determinately referred to by "Sally" and "Sandy." If so, then it would be indeterminate whether Sue is identical to Sally, although both "Sue" and "Sally" are determinate in reference, against Evans's result. Suppose, however, that the stipulations on "Sally" and "Sandy" to determinately refer to the two envisaged overlapping "precise" entities. It is indeterminate whether Sue is identical to Sally\*. But now both "Sue" and "Sally\*" are determinate in reference, again against Evans's result.<sup>10</sup>

Perhaps Williams's thought is that if Evans's result is to be avoided, the supposition that "Sue" determinately refers to a vague object, and that it is "metaphysically unsettled" whether this is Sally or Sandy, needs to *exclude* the existence of the two "precise" overlapping things I have claimed would also exist, given that these could be determinately referred to, either by "Sally" and "Sandy" or by "Sally\*" and "Sandy\*". This points to a more general worry, which arises in a more general context.

<sup>&</sup>lt;sup>9</sup>Or perhaps on one's choice of how to *word* claims regarding the persistence of things—if recent meta-metaphysical *indifferentism* with respect to the allegedly competing views on persistence turns out to be well taken.

<sup>&</sup>lt;sup>10</sup>It could be said that I am implicitly assuming a "many" solution as opposed to a so-called "supervaluationist" solution to the problem of the many—both of which are compatible with the view of vagueness as semantic indecision. I defend this solution in López de Sa (2013). In any case, this seems to be a further complication of the amoeba example that is absent from more general cases concerning "thing" or "object," like the mereological example considered below.

# 12.6 "Precise" Entities Against Ontic Vagueness

Williams offers his amoeba example just for illustrative purposes, as the strategy generalizes to cover other interesting cases, notably in connection with vagueness in statements about parthood. A more general worry arises in the more general context. Let me focus on Barnes and Williams's (2009) response to Weatherson (2003).<sup>11</sup>

Suppose that it is indeterminate whether a certain electron Sparky is part of Mount Kilimanjaro, and assume that "is part of" is precise. As we saw above, assuming classical logic and extensional mereology, this seems to entail that it is indeterminate whether Kilimanjaro is identical to Kilimanjaro+, the sum of Kilimanjaro and Sparky. There is no problem for the view of vagueness as semantic indecision here, provided that "Kilimanjaro" is vague and Kilimanjaro\* is one of the many candidate referents. But the alternative view that "Kilimanjaro" determinately refers to a vague object seems to face Evans's result again, assuming that "Kilimanjaro+" determinately refers to the sum of Kilimanjaro and Sparky and hence is determinate in reference.

Or does it? Barnes and Williams point out that "Kilimanjaro+" could be indeterminate in reference for reasons other than semantic indecision—and compatibly with the stipulation, so that determinately Kilimanjaro+ is the sum of Kilimanjaro and Sparky:

Here is one ontology of vague objects that makes 'K+' referentially indeterminate. There are two vague objects, *K*, and *dual-K*. For each x aside from Sparky, it is determinate that x is a part of K iff it is a part of dual-K. And further, Sparky is such that, determinately, it is part of K iff it is not part of dual-K.  $\dots$  <sup>12</sup> Recall the way that 'K+' was introduced: to pick out that thing which was the sum of K and s. Granted the ontology just sketched, it will be determinate that something meets that description: it will be either K or dual-K, but which one it is turns on which contains s, and that is an indeterminate matter. Hence *it will be indeterminate which vague object 'K+' refers to*. (Barnes and Williams 2009, 181–2)

*If* those were the only relevant objects that existed, then there would be nothing that is determinately the sum of Kilimanjaro and Sparky—although determinately there is something that is the sum of Kilimanjaro and Sparky. But *surely* there are further things—in particular something that determinately has exactly the parts of Kilimanjaro together with Sparky. As before, one could contend this was the thing determinately referred to by "Kilimanjaro+"—so it is indeterminate whether Kilimanjaro is identical to Kilimanjaro+, against Evans's result. But never mind that; let's just introduce the new expression "Kilimanjaro+\*" to determinately refer to it. Now, not only is it indeterminate whether Kilimanjaro is identical to Kilimanjaro" and "Kilimanjaro is identical to Kilimanjaro is identical to reference, again against Evans's result.

<sup>&</sup>lt;sup>11</sup>I am indebted here to Williams for a discussion of an earlier presentation of this argument on his blog *Theories'n Things* in July 2007.

<sup>&</sup>lt;sup>12</sup>A further assumption, omitted here, will concern us below.

I just said that *surely* there are such further things, but Barnes and Williams's additional assumption is precisely that there are *not*:

There are no objects which determinately have exactly the parts of K apart from s, and there are no objects which determinately have exactly the parts of K together with s. (Barnes and Williams 2009, 181)

As they conclude, given the other background assumptions,

we cannot have a vague object *together with* a plenitude of precise objects. (Barnes and Williams 2009, 183)

But they continue:

We suggest that here we reach stand-off: one who believes in a plenitude of precise objects has the resources to argue against the existence of a vague object "floating on top." But equally, one who believes in a plenitude of vague objects has the resources to argue against the existence of a precise object "floating underneath." Nothing we have as yet seen tells us whether the axe should fall on the vague objects, or on the precise objects. (Barnes and Williams 2009, 183)

As we saw, however, the notion of a vague object is not in as good standing as that of a "precise" object—contrary to what this verdict of a standoff suggests. That the existence of vague objects would *exclude* (given the assumptions) the existence of the "precise" ones may very well be a further reason to reject the notion of ontic vagueness as ultimately unintelligible.

## 12.7 Conclusion

Admittedly, the situation is dialectically delicate. Suppose the project of vindicating the intelligibility of the notion of ontic vagueness had succeeded, contrary to what I have suggested. Suppose that one worried whether, even then, Evans's argument provided a further independent objection to the possibility of intelligibly vague objects. *Then* exploiting the ways in which expressions could be indeterminate in reference as a result of such ontic vagueness as opposed to semantic indecision may well provide ingenious, unexpected responses to Evans's argument, which, unlike many other responses, succeed in granting the main controversial assumptions of the argument. This is by all means a remarkable and significant result.

I have argued, however, that those who doubt the intelligibility of the notion of ontic vagueness have not been given reasons to abandon their skepticism. To the extent that they regard Evans's argument as a further manifestation of the unintelligibility of the notion, they should judge the envisaged response, though ingenious, to be ultimately ineffective.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup>Earlier versions were presented at the *Arché*, *LOGOS*, and *PERSP Metaphysics* Seminars, and in a *Vagueness Workshop* in Charmey. Thanks to participants in these events and to Ross Cameron, Pablo Cobreros, Aurélien Darbellay, Manuel García-Carpintero, John Hawthorne, John Horden,

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