

# Lewis vs Lewis on the problem of the many

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**Abstract** Consider a cat on a mat. On the one hand, there seems to be just one cat, but on the other there seem to be many things with as good a claim as anything in the vicinity to being a cat. Hence, the problem of the many. In his ‘Many, but Almost One,’ David Lewis offered two solutions. According to the first, only one of the many is indeed a cat, although it is indeterminate exactly which one. According to the second, the many are all cats, but they are almost identical to each other, and hence they are almost one. For Lewis, the two solutions do not compete with each other but are mutually complementary, as each one can assist the other. This paper has two aims: to give some reasons against the first of these two solutions, but then to defend the second as a self-standing solution from Lewis’s considerations to the contrary.

**Keywords** Problem of the many · Vagueness · Supervenience · Lewis

Consider a cat on a mat, Tibbles. Most of the hairs, attached to her body, are clearly part of her, and a lot of others, spread out over the mat, are clearly not. But for a number of them, neither of these is the case: they are borderline cases of being hairs of hers. Take 1,000 of such questionable hairs, and consider 1,000 entities that have all but one of these hairs as parts of them (and also have all clear parts of Tibbles). Each one of them has equal claim to being a cat, and as good a claim as anything does, or so it seems. So they are all cats, which, together with the one that has all of the borderline hairs as a part, make up 1,001 cats, when we were inclined to say there was just one!

This is a version of the paradox of 1,001 cats as an instance of *the problem of the many* (Unger 1980). Roughly, where there seemed to be just one thing of a kind,

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there turns out to be a number of candidates with as good a claim as anything to be something of that kind.

In his ‘Many, but Almost One,’ David Lewis (1993) offered two solutions to the problem of the many. According to the first, only one of the many is indeed a cat, although it is indeterminate exactly which one. According to the second, the many are all cats, but they are almost identical to each other, and hence they are almost one. Lewis thought that these two solutions do not compete with each other but are mutually complementary, as each one can assist the other.

This paper has two aims: to give some reasons against the first of these two solutions, but then to defend the second as a self-standing solution from Lewis’s considerations to the contrary. In both parts I will assume the certainly plausible but also controversial view on the nature of vagueness, having it that vagueness is a kind of semantic indecision—a view of which Lewis himself is one of the main defenders.

As we will see, the first solution is sometimes referred to as “supervaluationist,” given the use of supervaluations over admissible sharpenings. The labeling might be misleading, as it is sometimes also used to refer to the general view about the nature of vagueness as semantic indecision which, with Lewis, I am also assuming here. Although proponents of the view of vagueness as semantic indecision have often also favored the so-called “supervaluationist” solution to the problem of the many, the points of this paper are that there are some reasons against their doing so and, more importantly, that there is no need for them to do so.

## 1 The problem of the many

*Mutatis mutandis* for clouds, mountains, chairs, coins, persons, and so on: the problem of the many is ubiquitous.

In each case, we have a paradox, in that we seem to have strong intuitions pulling in different, inconsistent directions. On the one hand, in our examples it is clear that we are considering cases where there seems to be just one cat, or just one cloud, and so on. But on the other hand, once we attend to the plurality of candidate entities, we realize that each of them has the features required for being a cat, a cloud, and so on. So each of them has an equal claim, and indeed as good a claim as anything in the vicinity, to be a cat, a cloud, and so on. I will speak of the first sort of intuitions as *counting* intuitions, as they concern the number of things of the kind we seem to be dealing with, and of the second sort as *grounding* intuitions, for they concern the thought that each of the many does exhibit the appropriate grounds to be of the kind.

A solution by *disqualification* aims to disqualify most or all of the candidates, thus rejecting and explaining away the grounding intuition. An *egalitarian* solution aims to vindicate the good claim of the plurality, thus rejecting and explaining away the counting intuition.

## 2 Vagueness as semantic indecision

I will assume here the view of vagueness as *semantic indecision*. It holds (roughly) that, whatever it is that in the thoughts, experiences and practices of language users

determines the meaning of expressions, it fails to determine any referent in particular from a given range of candidates for vague expressions.

Every way of (“arbitrarily”) fixing what is left semantically undecided gives rise to a “precisification” or “sharpening” of the original vague expression. Although all such sharpenings are, by their essence, arbitrary to a certain extent, not all of them are *admissible*. For the case of predicates, admissible ones should preserve *clear cases*, both of application and of non-application—Yul Brynner should count for ‘is bald,’ while Andy García cannot—and *penumbral truths*—‘Whoever is bald is bald,’ ‘If someone is bald, then so is anyone who is balder’, and so on, which would count as true even with respect to borderline cases in the “penumbra.”<sup>1</sup>

What one says by means of a vague expression is (determinately) true if it counts as true according to all admissible sharpenings; is (determinately) false if it counts as false according to all of them; and is indeterminate otherwise.

### 3 The so-called “supervaluationist” solution

The view of vagueness as semantic indecision provides a solution to the main paradox involving vagueness. Consider a sorites series going from our paradigm cat Tibbles to pet-robot Tama, such that each individual has one more natural organ replaced by an artificial prosthesis.<sup>2</sup> As both Tibbles and Tama are paradigm cases of application and non-application of ‘is a cat,’ ‘Tibbles is a cat’ turns out to be true, as all sharpenings count it as such, whereas ‘Tama is a cat’ turns out to be false, as all sharpenings count it as such. With respect to the sorites premise itself, ‘If one of the individuals is a cat, so is one which differs from the first by having just one organ replaced by an artificial prosthesis,’ it turns out to be false, as all sharpenings count it as such. Each fixes a sharp boundary for cathood “arbitrarily” at a particular juncture, albeit a different one for each. Hence, there is a cut-off point, although it is indeterminate exactly where it is.

The first solution offered by Lewis to the problem of the many aims to disqualify all but one of the candidates in a somewhat similar fashion. As we have just seen, ‘is a cat’ is vague and hence, assuming vagueness as semantic indecision, it has different admissible sharpenings. *Suppose* that each of them is such that one and only one of the different candidates counts as a cat, according to it—a different one, according to different sharpenings. After all, they all have an equal claim to be the one and only one

<sup>1</sup> See *inter alia* (Fine 1975; Keefe 2000). Strictly speaking, sharpenings are of the language as a whole, and not of isolated expressions. How to characterize satisfactorily the notion of *admissible* that these connections (possibly among others) constitute, though central to a full defense of the view of vagueness as semantic indecision, is not crucial for our present concerns. Notice that ‘is admissible’ is, of course, itself vague: this is arguably part of what accounts, in this framework, for the phenomenon of “higher-order” vagueness. Complications involving this will be set aside here.

<sup>2</sup> For further info about Tama, see <http://news.bbc.co.uk/1/hi/sci/tech/652293.stm>. As with the usual examples involving ‘is bald,’ ‘is rich,’ etc., this involves idealization regarding which feature is such that the predicates seem tolerant with respect to small changes in it, but not with respect to big ones: number of hairs, amount of money, and here replacement of natural organs by artificial prosthesis. If whole organs seem too big for this—when attending to particularly important ones such as brains, hearts and so on—replace the series by a longer one in which merely tiny bits thereof are replaced.

cat, if such there is. Then, one and only one of the many is indeed a cat, although it is indeterminate exactly which one. This is how the solution rejects, and aims to explain away, the grounding intuition: the arbitrariness felt in having one of the candidates with a better claim than the rest comes from the fact that it is indeterminate which of them is the one and only cat.<sup>3</sup>

As I said, it is arguably confusing that this solution is often referred to as “supervaluationist,” as there might be reasons against it even assuming the view of vagueness as semantic indecision. For according to the view, admissible precisifications of vague predicates preserve clear cases of application as well as penumbral truths—but, as we are about to see, the precisifications envisaged by the defender of the so-called “supervaluationist” solution of the problem of the many seem to do neither—and would thus be rendered inadmissible.

#### 4 Penumbral connections

The cat on the mat is as close to a paradigmatic cat as anything is: Tibbles figures at one of the clear ends of the considered sorites series, could be used as the relevant sample in an ostensive definition of ‘is a cat,’ and what have you. Now according to the defender of the solution we are considering, in each sharpening just one of the cat-candidates is indeed the one and only cat—and indeed a paradigmatic cat, if anything actually is.<sup>4</sup> But clearly all the others are also equally similar to a paradigmatic cat with respect to the features relevant for something being a cat—after all, they all count as the one and only cat according to some other of the sharpenings. Paraphrasing Lewis himself (1993, p. 168), the cat-candidates are all cat-like in size, shape, weight, inner structure, and motion. They vibrate and set the air in motion—in short, they purr (especially when you pet them). Any way a cat can be at a moment, cat-candidates also can be; anything a cat can do at a moment, cat-candidates also can do. They are too cat-like not to be cats! Still, they are not counted as cats by the envisaged sharpening.

These sharpenings thus violate what, following Unger, we can call “Principle of Minute Differences:”

(PMD) If something is a *paradigm* case of an *f*, and something else is very similar to the former with respect to the features relevant for something being an *f*, then the latter is also an *f*;

<sup>3</sup> By contrast with other solutions by disqualification, the present one is “metaphysically austere” in the sense of not positing a further (“vague in itself”) entity, over and above the many candidates, with a better claim to be a cat. Lewis (1993) contains what are—for some, myself included—the main reasons against vagueness *in rebus*: it is hard to have a correct conception of what a vague entity would be, and the phenomena allegedly motivating the view are neatly accommodated by the alternative views. Regarding the problem of the many, it is not even clear that the view would actually provide a solution. To begin with, it is not clear why being, at least possibly, vague *in rebus* should be a feature of things like cats at all: hence, adding a vague object to the 1,001 candidates only makes it a paradox of the 1,002 cats. Furthermore, and perhaps even more importantly, it is not clear why there would not be 1,001 *vague* cat-candidates.

<sup>4</sup> I.e. something that would indeed be a paradigmatic cat, if existing isolated from the other candidates (if being paradigmatic requires being determinately a cat): see the discussion in the next section, particularly footnote 8.

where ‘f’ is substituted by a common noun of the sort of those that concern us here—‘cat,’ ‘cloud,’ ‘coin,’ ‘mountain,’ ‘person,’ and so on.<sup>5</sup>

On the face of it, (PMD) seems to belong to part of the core of what constitutes the meaning of the relevant expressions: after all, it seems just a manifestation of the grounding intuitions that constitute the problem of the many. So it is a good candidate for the sort of penumbral truths that admissible precisifications should preserve. But, as we have seen, the precisifications envisaged by the defender of the so-called “supervaluationist” solution of the problem of the many would violate it, and would be rendered thereby inadmissible.

Three observations are worth mentioning. First, due to the restriction to paradigm cases in just the antecedent of the conditional, (PMD) is not to be rejected on the basis of soriticality.<sup>6</sup>

Second, it can be pointed out that, although not soritical, one could have reasons at the end of the day to reject (PMD), its intuitive appeal notwithstanding—in as much as (according to most solution to the sorites paradox) one has reasons at the end of the day to reject the sorites premise, its intuitive appeal notwithstanding. I agree. After all, as emphasized in the introduction, we are dealing with a paradox in that we seem to have strong intuitions pulling in different, inconsistent directions, and each solution would ultimately have to reject (and explain away) *something* which was indeed intuitive. Being one by disqualification, the so-called “supervaluationist” solution will ultimately reject the grounding intuition and thus, unsurprisingly, (PMD). The present consideration concerns however not merely the rejection of (PMD) *per se* but the absence of *explaining away* the underlying intuition. As such, it is not, admittedly, a *conclusive* argument against the solution, in that nothing precludes that one such explanation turns out to be forthcoming.<sup>7</sup> But, I hope, it is still worth considering this notwithstanding—particularly as it contrasts with the situation regarding the rival alter-

<sup>5</sup> The formulation is slightly altered; the original one runs: “With respect to any *kind of ordinary things*, if something is a *typical member* of the kind, then, if there are entities that differ from that thing, in any respects relevant to being a member of the kind, quite *minutely*, then each of those entities is a member of that kind.” (Unger 1980, p. 447).

<sup>6</sup> Thus the present consideration is crucially different from the apparently similar one offered by McKinnon (2002), when claiming the envisaged sharpenings are rendered inadmissible by violating the maxim of “Non-Arbitrary Differences” (here stated for coins):

(NAD) For any coin and non-coin, there is a principled difference between them which forms the basis for one’s being a coin and the other’s being a non-coin;

which, he says, “imposes the following penumbral connection on every permissible sharpening: if *d* is a coin, then so is *e* unless it differs from *d* in a principled way” (2002, p. 333)—a principled difference is a relevant difference in the features that are relevant for something being a coin, so that the coin-candidates do not differ in a principled way. (NAD) crucially differs from (PMD) in not being restricted to paradigmatic cases. But without the restriction, there is every reason to reject the claim that (NAD) is a penumbral truth. Rather, it is an intuitively appealing but ultimately rejectable *soritical* principle, which is inconsistent with there being (paradigmatic) coins and (paradigmatic) non-coins, which can be connected in a sorites series made up of individuals that do not differ from their adjacent ones in a principled way.

<sup>7</sup> Such an explanation might try to exploit the thought voiced by Lewis himself: “When is something very cat-like, yet not a cat?—When it is just a little less than a whole cat, almost all of a cat with a little left out. Or when it is just a little more than a cat, a cat plus a little something extra. Or when it is both a little more and a little less.” (Lewis 1993, p. 171). For some (admittedly, non-conclusive) misgivings regarding this idea, see below footnote 12.

native where, I will be claiming in the second part of the paper, the counting intuition is not only rejected but in fact explained away by an independently motivated mechanism.

Third, I have been assuming that there *are* paradigmatic cats. But maybe we have reasons at the end of the day to reject this, its intuitive appeal notwithstanding. Once again, I agree. In fact, however, this actually points to a perhaps more straightforward—even if again admittedly non-conclusive—consideration against the admissibility of the sharpenings envisaged by the so-called “supervaluationist” solution to the problem of the many.

## 5 Clear cats

The cat on the mat is a clear case of a cat, if anything is. But according to the defender of the solution we are considering, each of the cat-candidates is excluded by some (actually, all but one) of the envisaged precisifications. Thus nothing in the vicinity of Tibbles is counted as ‘cat’ by all of the envisaged precisifications, so *a fortiori* no clear case for cathood is such that *it* is counted as ‘cat.’ Yet precisifications are admissible only if they preserve such cases. In other words, according to the so-called “supervaluationist” solution to the problem of the many, nothing is such that *it* is *determinately* a cat.<sup>8</sup>

There seems to be something deeply disturbing about the thought that there is no relevant difference between the individuals at the clear end and in the middle ground of the sorites series from cats to pet-robots: all of them are, according to the solution, merely *borderline* cases with respect to ‘is a cat.’ They are similar in being counted as cats by some but not all of the sharpenings of the predicate. Emphatically:

There isn’t, anywhere in the world, anything of which it is determined that it satisfies ‘mountain.’ Forget about thinning hair. Nothing is determined to satisfy ‘bald man,’ because nothing is determined to satisfy ‘man.’ (McGee 1998, p. 145)

Thus the so-called “supervaluationist” solution to the problem of the many requires that each of the candidates is rejected by some sharpening, but in so doing the sharpenings are rendered inadmissible, if clear cases should indeed be such that they are determinate cats.

Again, it can be pointed out that one could have reasons at the end of the day to reject that *there are* determinate cats, its intuitive appeal notwithstanding—just as with the sorites premise. And again, I agree. The present consideration is that this would be quite a surprising result, to say the least, as McGee himself states—and one that requires that one would *explain away* the underlying rejected intuition. As such, this consideration is not, admittedly, a *conclusive* argument against the solution, in that nothing precludes

<sup>8</sup> On standard ways of characterizing what it is for something to satisfy a determinacy-involving matrix, see (McGee 1998). More precisely: none of the ordinary cases of cats we can point to are such—as arguably nothing excludes that there be counterfactual determinate cats in worlds where for each tiny particle it is determinately the case whether it is part of them or not.

that one such explanation turns out to be forthcoming.<sup>9</sup> But, as before, I hope it is still worth considering—particularly as I will claim below this contrasts with the situation regarding the rival alternative to be discussed, where, as I said, the rejected intuition is in fact explained away by an independently motivated mechanism.

## 6 Summing up

The first solution offered by Lewis to the problem of the many aimed to disqualify all but one of the candidates—a different one, according to different sharpenings. But admissible precisifications of vague predicates preserve clear cases of application as well as penumbral truths, and the precisifications envisaged by the defender of the so-called ‘supervaluationist’ solution of the problem of the many seem to do neither.

Surprisingly enough, Lewis himself does not seem to disagree with such a judgment against the so-called “supervaluationist” solution to the problem of the many, after all. When considering the sense in which the solution is merely partial, and in need of assistance, he says:

When we have been explicitly attending to the many candidates and noting that they are equally catlike, context will favor [sharpenings that put every (good enough) candidate into the extension of ‘cat,’ and not sharpenings that put exactly one]. This is one way that almost-identity helps a combined solution. It is still there even when we discuss the paradox of the 1001 cats, and we explicitly choose to say that the many are all cats, and we thereby make the supervaluationist solution go away. (Lewis 1993, p. 180)

To my mind, this seems close to acknowledging that the so-called “supervaluationist” solution goes away precisely when one is dealing with the problem of the many. One might then wonder in what sense it deserves to be called *a solution* to the problem at all. In fact, this, plus the sense we will discuss in which, for him, the alternative solution is in turn in need of assistance (plus the very title of his paper itself!), might suggest that he did not—even partially—hold a “supervaluationist” solution to the problem of the many.

## 7 The almost-identity solution

Lewis’s second solution does not aim to disqualify any of the candidates: it is an egalitarian solution, aiming to vindicate the good claim of the plurality. The many are indeed cats. It thus rejects and tries to explain away the counting intuition—that there is just one cat on the mat.

All the cat-candidates are certainly different things: their non-identity is actually obvious from the very beginning, as they differ in their parts. But *different* things

<sup>9</sup> Notice that it would not suffice to merely point that, although nothing is such that *it* is determinately a cat, it can still be true that determinately there are cats in the vicinity of Tibbles. For this by itself seems to fail to capture any difference with (intuitively) borderline cases in the middle of the sorties series. See (Williams 2006).

need not be *distinct*, in the sense of non-overlapping. There may be something that is a common part of them, and thus be *partially identical*, as Lewis puts it following Armstrong.<sup>10</sup> All the cat-candidates are indeed partially identical to each other. They are all cats, the solution has it, but not distinct cats. Actually, as Lewis says, any two of the cat-candidates overlap almost completely, and thus they are *almost* identical. This provides the almost-identity solution to the problem of the many:

Strictly speaking, the cats are many. No two of them are completely identical. But any two of them are almost completely identical; their differences are negligible ... We have many cats, each one almost identical to all the rest. (Lewis 1993, p. 178)

The many candidates have as good a claim as something can possibly have to being a cat. Thus they all *are* cats.<sup>11</sup>

## 8 Counting cats

Almost everybody in the debate regards the almost-identity solution to the problem of the many as just “implausibly counterintuitive,” and as such it is normally dismissed with (at most) a couple of sentences to the effect that it is obvious that there is just one cat on the mat.

It is beyond doubt that *obviously* there *seems* to be just one cat on the mat, and the counterintuitive character of the solution is no less manifest. No surprise here: after all, as I have been emphasizing, we are dealing with a solution to *a paradox*, which as such needs to ultimately reject something for which there were strong intuitions in its favor—explaining such intuitions away.

Now, whether the undoubtedly counterintuitive solution is *implausibly* so will depend on how plausible is the explaining away of the rejected counting intuition on offer—in particular, how plausible it is in contrast to the plausibility of the alternatives. And this is something, it seems fair to say, which the swift dismissals of the almost-identity solution mentioned do not tend to pause on.

According to Lewis, in most conversational contexts, the intuitive (and appropriate) answer to ‘How many cats are there on the mat?’ is indeed ‘Just one.’ Although strictly speaking false, it is loosely speaking true *enough*:

<sup>10</sup> For Armstrong, however, things may be partially identical in virtue of sharing a “non-mereological constituent,” like two different states of affairs involving the same universal but different (perhaps indeed distinct) particulars. In the present paper, as in Lewis’s, two things are (at least) *partially identical* iff there is something that is part of both. Partial identity is therefore simply *identity of some parts*.

<sup>11</sup> Lewis’s second, almost-identity solution is thus an “over-population” solution, in (Weatherson 2004)’s taxonomy, as it rejects the premise that there is at most one cat on the mat. According to Weatherson, however, this is a misattribution, and he quotes Lewis stating that the second solution is of a “kind which concedes that the many are cats, but seeks to deny that the cats are really many” (Lewis 1993, p. 175). But, as we have just seen, Lewis is quite explicit in claiming that, strictly speaking, there are many cats. As to the quote provided by Weatherson, occurring before the discussion of the second solution has started properly, it can be seen as a way of making, non-strictly, the point about non-strict counting to be considered shortly.



The cats are many, but almost one. By a blameless approximation, we may say simply that there is one cat on the mat. Is that true?—Sometimes we'll insist on stricter standards, sometimes we'll be ambivalent, but for most contexts it's true enough. (Lewis 1993, p. 178)

To elaborate, it is a generally acknowledged fact that in a lot of conversations, what is appropriate is to (non-strictly) count by relations other than (strict) identity. Sometimes one counts by relations of partial indiscernibility—which are equivalence relations on the relevant domains. One such case, mentioned by Lewis, is the following:

If an infirm man wishes to know how many roads he must cross to reach his destination, I will count by identity-along-his-path rather than by identity. By crossing the Chester A. Arthur Parkway and Route 137 at the brief stretch where they have merged, he can cross both by crossing just one road. (Lewis 1993, p. 175)

Lewis gives another case, structurally more similar to ours in the relevant respects:

You draw two diagonals in a square; you ask me how many triangles; I say there are four; you deride me for ignoring the four large triangles and counting only the small ones. But the joke is on you. For I was within my rights as a speaker of ordinary language, and you couldn't see it because you insisted on counting by strict identity. I meant that, for some  $w, x, y, z$ , (1)  $w, x, y$ , and  $z$  are triangles; (2)  $w$  and  $x$  are distinct, and ... and so are  $y$  and  $z$  (six clauses); (3) for any triangle  $t$ , either  $t$  and  $w$  are not distinct, or ... or  $t$  and  $z$  are not distinct (four clauses). And by 'distinct' I meant non-overlap rather than non-identity, so what I said was true. (Lewis 1993, fn. 9)

Here one seems to be counting by the (non-transitive) relation of overlapping.

This kind of cases, which arise independently of issues having to do with the problem of the many we are discussing, motivate the view about the pragmatics of counting conversations to the effect that we often loosely count by relations other of identity.

Now suppose that the many cat-candidates are indeed cats. The prediction is that the independently motivated conversational mechanism about counting would indeed make it the case that, in most conversations, one should count by almost-identity, delivering the answer 'Just one.' to the question of how many cats there are on the mat. For the difference between almost identical cats will be, in most such contexts, negligible. Hence how the counting intuition is explained away, according to the almost-identity solution to the problem of the many.

Still, there is a sense in which, strictly speaking, the cats are indeed many, according to the solution. One would then expect there to be contexts, not of the most ordinary variety perhaps, in which the appropriate answer to the question, 'How many cats are there on the mat?' is indeed 'Many.' Such a context would be one in which the minute differences between the different almost identical cat-candidates are not negligible but, by contrast, relevant. Not an ordinary context, indeed. But the context of considering the paradox seems to be precisely a context of the kind.

With these programmatic remarks I do not aim to dispel all the reasonable doubts that might arise in connection with the Lewisian explanation of the ultimately rejected counting intuition. But I *do* hope it will transpire that the view is not completely implausible—and its prospects, for all we know, may easily be actually more promising than those of the so-called “supervaluationist” solution to the problem of the many.

I want to devote the rest of this second part of the paper to discussing the sense in which, according to Lewis, the almost-identity solution is also in need of assistance, to be provided by supervaluations.

## 9 The problem of the two

According to Lewis, the almost-identity solution is in need of assistance, to be provided by supervaluations. He mentions two considerations. Here is the first one:

Why not let almost-identity do the whole work? For one thing, not every case of the problem of the many is like the paradox of 1001 cats. The almost-identity solution won't always work well. We've touched on one atypical case already: if not a problem of the many, at least a problem of the two. Fred's house taken as including the garage, and taken as not including the garage, have equal claim to be his house. So Fred has two houses. No! ... But although the two-house candidates overlap very substantially, having all but the garage in common, they do not overlap nearly as extensively as the cats do. Though they are closer to the identity end of the spectrum than the distinctness end, we cannot really say they're almost identical. So likewise we cannot say that the two houses are almost one. (Lewis 1993, p. 180)

Agreed. But, on the face of it, this by itself does not prove the almost-identity solution to be substantially incomplete—rather, it shows at best that the appropriate “many” solution, if it is to take care both of instances of the problem of the many such as the paradox of the 1,001 cats and the problem of the two, should take a more general form—having the almost-identity version as a special case. And we have already seen what this form might be, when considering the (independent) case of counting the triangles in the square: in most natural contexts, relevant *overlap*, not necessarily amounting to almost-identity, can be the right relation when (loosely) counting by relations other than (strict) identity.<sup>12</sup>

<sup>12</sup> As an aside, let me mention that properly elaborated this response may also provide a way of resisting the suggestion that expressions of the sort of ‘is a rock,’ ‘is a cat,’ ‘is a conscious being’ and the like signify *maximal* properties, in Ted Sider’s (2001, 2003) sense—and its consequence that, contrary to appearances, the properties of being a rock, a cat, or a conscious being turn out to extrinsic, in unexpected ways. (A property F is *maximal*, in this sense, iff (roughly) large parts of an F are not themselves Fs.) The main consideration Sider provides in favor of the contention seems to involve in effect the counting intuition:

Otherwise in the vicinity of every house there would be a multitude of houses; in the vicinity of every cat there would be a multitude of cats. (Sider 2003, p. 139)

Sider is of course very familiar with mechanisms that could alternatively explain away intuitions about counting—he himself appeals to the independently motivated mechanism of domain restriction in defending universalism from the charge that in most conversations people would not count “weird” mereological sums

## 10 Which of the cats is “the cat on the mat”?

The other consideration that Lewis mentions concerns the semantics of singular definite descriptions such as ‘the cat on the mat.’ As I understand him, Lewis points to the fact that, assuming the general view of vagueness as semantic indecision, there should be a—possibly less than fully strict—sense in which ‘the cat on the mat is brown’ counts as true, whereas ‘the cat on the mat includes hair  $h_{17}$ ’ counts as neither true nor false—provided  $h_{17}$  is part of some but not all the many cats.

One mechanism for obtaining this result is offered by Lewis himself on behalf of the defender of the almost-identity solution:

We might subject the definite description to Russellian translation:

R1 There is something that is identical to all and only cats on the mat, and that includes  $h_{17}$ .

Or equivalently,

R2 something is identical to all and only cats on the mat, and every cat on the mat includes  $h_{17}$ .

Both translations come out false, because nothing is strictly identical to all and only cats on the mat. That’s not the answer we wanted. So we might relax ‘identical’ to ‘almost identical.’ When we do, the translations are no longer equivalent: (R1)-relaxed is true, (R2)-relaxed is false. Maybe we’re in a state of semantic indecision between (R1)-relaxed and (R2)-relaxed; if so, we could apply the supervaluation rule to get the desired gappiness. (Lewis 1993, p. 181)

So, in general, the proposal is that ‘the cat on the mat is F’ receives, non-strictly, the value received by both ‘there is something that is almost-identical to all and only cats on the mat, and it is F’ and ‘something is almost-identical to all and only cats on the mat, and every cat on the mat is F’ if such there is, and is, non-strictly, indeterminate otherwise.

Of course, as Lewis observes, we would get the gappiness more directly—and indeed as the strict status—if things were the way they are according to the so-called “supervaluationist” solution to the problem of the many.

So far, so good. In what sense does all this tell against the “completeness” of the almost-identity solution? What Lewis says is this:

Whichever way we go, supervaluations give us the gappiness we want. It’s hard to see how else to get it. (Lewis 1993, p. 182)

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Footnote 12 continued

as things over and above their more natural constituents. This is why, I take it, he aims to offer a further, independent motivation:

Forget about counting; consult your linguistic intuitions about whether House-minus is a house directly. Mine say that it is not. (2001, p. 359)

But this further consideration seems to me to be rather weak: for what it is worth, mine say that it is.

So it seems to me that, rather than submitting a consideration for the view that the almost-identity solution to the problem of the many *as such* is in need of assistance, he is in effect observing that supervaluations might still be needed to account for *other* issues—for instance, involving the semantics of singular definite descriptions.

## 11 Which of the cats is “Tibbles”?

And this seems to be certainly right—assuming the view of vagueness as semantic indecision. Take the expression ‘Tibbles.’ This is the name of the cat on the mat, we were told. Which of the many cats is, strictly speaking, Tibbles? It is plausible to hold that whatever it is that in the thoughts, experiences and practices of language users determines the meaning of expressions, it fails to determine any one of the cats as the referent of ‘Tibbles.’ A view of vagueness as semantic indecision with respect to singular terms like ‘Tibbles’ seems here as plausible as with respect to predicates like ‘is bald’ or ‘is a cat.’ Thus ‘Tibbles’ indeterminately refers to any of the cats, and statements containing it are to be regarded as (determinately) true (or false) if and only if they are counted as such by all admissible sharpenings. Hence ‘Tibbles is on the mat’ is, strictly speaking, true; whereas ‘Tibbles has hair  $h_{17}$  as a part’ is, strictly speaking, indeterminate.<sup>13</sup>

To acknowledge the vagueness of ‘Tibbles,’ and hence the semantic indecision among the different candidates, is independent of whether, in any sharpening, the rest of the candidates that are not selected as the referent of ‘Tibbles’ are counted or not under the extension of ‘is a cat.’ In other words, the vagueness as semantic indecision of ‘Tibbles’ is independent of whether one adopts the so-called “supervaluationist” solution to the problem of the many, or the almost-identity one. Actually, if the overall argument of this paper is right, the defender of the view of vagueness as semantic indecision, with respect to both ‘Tibbles’ and ‘is a cat,’ not only *can* but indeed *should* favor the almost-identity—or a more general “many” solution to the problem of the many.

## 12 Conclusion

There seem to be serious difficulties for the so-called “supervaluationist” solution to the problem of the many. The almost-identity solution seems to be capable of offering a satisfactory explanation of the counting intuition that is ultimately rejected. And, anyway, the considerations offered by Lewis do not show that it is need of assistance—rather at most that it should be generalized, in a predictable way, to cover related cases such as the problem of the two; and that supervaluations are nonetheless required to deal with issues other than the problem of the many.

<sup>13</sup> As one referee notices, assuming the proposal about definite description in the previous section, ‘Tibbles is the cat on the mat’ will turn out to be similarly indeterminate (in the relaxed reading), given the “many” solution to the problem of the many. By contrast, the so-called “supervaluationist” solution to the problem of the many can allow that it be true, provided there are penumbral connections appropriately linking ‘Tibbles’ to ‘the cat on the mat.’

All in all, one might think that it is the second solution—not the first, and not with assistance from the first—that Lewis could have had in mind all along, his own presentation notwithstanding.

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