The Vagueness of ‘Vague’: Rejoinder to Hull

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Is ‘vague’ vague? Aldrich (1937: 94) didn’t think so. Austin (1962: 126) did, and Sorensen (1985) offered a proof. Deas (1989) rejected the proof, but in (2003) I sided with Sorensen. Now Hull (2005) replies on behalf of Deas. Why so much fuss about a single word? One reason, I think, is that a lot depends on how we settle the question. For example, Frege (1903: §56) famously remarked that logic must be restricted to non-vague predicates. But if ‘vague’ is vague, then so is ‘non-vague’, hence the restriction is itself vague and, therefore, helpless. For another example, incoherence theorists such as Unger (1979) have claimed that vague terms have no clear instances, blocking the sorites paradox at the base step. If ‘vague’ is vague, however, then either it is a clear instance of itself, in which case the incoherentist claim is plainly false, or it has an empty extension, in which case the claim is vacuously true (there are no vague predicates) and the paradox strikes back. Finally, if ‘vague’ is vague, then—as Hyde (1994) has argued—vague predicates must suffer from the phenomenon of higher-order vagueness (at least *some* must, if Tye (1994) is right).[1] So I agree with Hull: this is no small issue and we need to look at it closely.

That ‘vague’ is vague is, on the face of it, a plausible thought. There are predicates, such as ‘small’, that are clearly vague and predicates, such as ‘less than 100’, that are clearly non-vague, but there are also predicates for which it seems unclear whether they are vague or not. Is there a precise moment at which a person ceases to be *alive*? Is there an exact moment at which a woman becomes a *mother*? In fact, it is not just predicates that can plausibly be classified as borderline cases of ‘vague’. ‘Everest’ is a vague name and ‘Wyoming’ isn’t. But what about ‘John’? Does it have a precise referent? One can construct an Unger-type sorites to show that it doesn’t: the removal of one body cell does not affect the identity of John but the removal of lots of body cells does. On the other hand, one may consider rejecting such a sorites in various ways, e.g., by setting a cut-off point on biological grounds. As

[1] My point in (2003) was that Hyde cannot rely on Sorensen’s proof on pain of circularity, but this does not affect the validity of Hyde’s argument; it only makes the argument depend on the critical assumption that ‘vague’ is vague.

things stand, it just seems unclear whether the linguistic practices underlying our uses of a proper name like 'John' are precise enough to settle the question. 'John' seems to be a borderline case of 'vague'.

But these are just intuitions. The point of Sorensen's argument is precisely to go beyond mere intuition and to settle the issue by *proving* that 'vague' is vague: 'vague' is vague because it is prone to the sorites paradox (the predicate '1-small' is vague and the predicate '10^9-small' isn't, yet we are inclined to say that if 'n-small' is vague, so is 'n+1-small', just as we are inclined to say that if n is small, so is n+1). So what is wrong with this proof? Building on Deas's early criticism, Hull offers three independent answers:

(i) the vagueness exhibited by Sorensen's sorites is just the vagueness of 'small';
(ii) Sorensen's proof is unsound, for it rests on a general assumption (that predicates which possess borderline cases are vague) that is false;
(iii) the conclusion of the proof is unacceptable, for it is possible to create Sorensen-type sorites even for predicates that are paradigmatically precise.

Each of these three claims would by itself suffice to undermine Sorensen's argument. Yet none of them is, on my reckoning, warrantly justified.

1.

Concerning (i), Hull's criticism of my construal of Deas is well taken. The issue is not whether the vagueness of 'vague' is parasitic upon the vagueness of 'small' (for that would already amount to conceding the vagueness of 'vague', parasitic or otherwise); rather, the issue is whether the vagueness exhibited by Sorensen's sorites is just the vagueness of 'small'. Still, Hull seems to agree[2] with my objection to Deas's biconditional:

(1) 'n-small' is vague if and only if n is small.

Since 'n-small' can be vague when n is not small (but, rather, borderline small), the left-to-right direction of (1) does not generally hold.[3] And if (1) is rejected, then we

[2] I say 'seems to agree' because Hull makes contrasting claims in this regard. In Section 2 he says he agrees, so I take this to be his official position: if it is indefinite whether n is small, then it true that 'n-small' is vague, hence the two sides of (1) have different truth-conditions. But in Section 1 Hull says that those intermediate values of n for which it is not clear whether n is small will produce borderline cases of 'n-small' with respect to 'vague'—which amounts to saying (wrongly) that if it is indefinite whether n is small, then it indefinite whether 'n-small' is vague.

[3] Even if one accepts bivalence, as Sorensen does, (1) is unreliable. For if n is borderline small, then the sentence 'n is small' can (unbeknownst to us) be false, while ''n-small' is vague' is bound to be true.

are left with no reasons to settle the issue in the affirmative, i.e., no reasons to conclude that the vagueness exhibited by Sorensen's sorites is just the vagueness of 'small'. All we can say is that if the vagueness exhibited by Sorensen's sorites is the vagueness of 'vague', then such vagueness is parasitic on that of 'small'. But as Hull observes, this is beyond the point: parasitic vagueness is vagueness.

Besides, even if the sorites for 'vague' were truly parasitic on the sorites for 'small', the claim that the former provides no evidence for the vagueness of 'vague' would need argument. Consider, for an analogy, the following Sorensen-type sorites for the sentential predicate 'true':

(2) '1 is small' is true.
If 'n is small' is true, then so is 'n+1 is small'.
Therefore, '10^9 is small' is true.

Is this just a convoluted restatement of the sorites for 'small'? On a deflationary conception of truth this may be a plausible thought. On a non-deflationary conception, however, this is far from obvious—even on a conception that subscribes unrestrictedly to the analogue of (1), namely, the disquotation schema:

(3) 'n is small' is true if and only if n is small.[4]

To the extent that to assert '*p* is true' is not *just* to assert *p*, in spite of their material equivalence, to argue as in (2) is not just a convoluted way of producing a sorites for 'small'. The sorites in (2) is parasitic on the sorites for 'small', but it goes beyond. Similarly, then, unless one subscribes to a deflationary conception of vagueness (if such there be), showing that the sorites for 'vague' is parasitic on the sorites for 'small' would not by itself rule out the former as evidence for the vagueness of 'vague'. On the contrary, one can bestow such parasitic dependence with the explanatory value it deserves: it is (among other reasons) *because* 'small' is vague that 'true' is vague, and it is (among other reasons) *because* 'small' is vague—in fact higher-order vague—that 'vague' is vague.

2.

Concerning (ii), consider a predicate that has borderline cases. According to Hull (and Deas), placing the blame on the predicate needs argument: perhaps it is the borderline cases themselves that are responsible for the "borderlinity". I agree that this is a possibility. To be sure, I do not think that Hull's example makes the point adequately, for I do not think that

[4] For the record, I do not accept (3), though I reckon that the left- and right-hand sides of (3) are logically equivalent. My (supervaluational) reasons are essentially those of Keefe (2000: 213ff).

(4) A large number is 1000

has the logical form of a subject-predicate statement in which ‘large’ occurs in the subject. On my reckoning, (4) is just a grammatical variant of

(5) 1000 is a large number

whose logical form, as Hull agrees, is one in which ‘large’ occurs in the predicate. (Alternatively, we may construe (4) as an existential statement of the form

(6) There exists a large number that is identical with 1000,

in which case, again, ‘large’ occurs in predicate position.) But let us consider a different example. Following Deas, suppose I make a fencing-in gesture over one corner of a tabletop and say:

(7) This area is less than two square feet.

Here we seem to have an indefinite statement in which the predicate is perfectly precise, so the indefiniteness must lie in the subject term ‘this area’. The gesture that accompanied my assertion failed to pick out a precise area in physical space. Fair enough. I would not say that we have found a borderline case of ‘less than two square feet’ which is responsible for the borderlinity, for I take a borderline case of a predicate to be an *object* to which the predicate neither applies nor fails to apply. But if we construe ‘borderline case’ *de dicto*, i.e., if we take a borderline case of a predicate to be a *term* which, when combined with the predicate, yields a statement that is *prima facie* indefinite in truth-value, then I agree that we have found a case in point. However, this is completely irrelevant to Sorensen’s argument unless we can show that every indefinite statement of the form

(8) ‘*n*-small’ is vague

is also a case in point. Deas says it is,[5] the suggestion being that ‘*n*-small’ stems from a gesture in logical space that fails to pick out a precise concept. Yet this is mistaken. We are not interested in the referent of ‘*n*-small’, for this term is not used but mentioned in (8). Rather, we are interested in the referent of ‘‘*n*-small’’. And this is perfectly precise: ‘‘*n*-small’’ refers to the predicate ‘*n*-small’.[6] Again, Hull

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[5] Deas’s claim refers to an instance of (8) in which *n* is borderline small, but we have already seen that under such circumstances (8) would not be indefinite but true. In order for (8) to be indefinite, *n* must be borderline borderline small (or borderline borderline … borderline small). Deas’s claim, however, is not affected by this qualification.

[6] Strictly speaking, this introduces a complication in Sorensen’s sorites, since the inductive step quantifies within quotation marks. However, we can bypass the complication by replacing the

seems to agree with this.[7] But if we agree on this, then we are left with no reasons to believe that (ii) is detrimental to Sorensen's purported proof. To reject the assumption that *all* predicates with borderline cases are vague (with 'borderline case' understood *de dicto*) is to assert that *some* predicates with borderline cases are not vague. It remains to be shown that 'vague' is one of them.

As a matter of fact, Hull does have an argument to this effect. It is an argument that exploits a criterion he attributes to Fine (1975):

(A) The indefiniteness of a statement is due entirely to a particular term if, and only if, precisifying that term should result in a definite statement.

(Hull has a conditional, corresponding to the 'only if' direction, but I take it that he means a biconditional on pain of affirming the consequent.) Since we could precisify '*n*-small' to mean 'less than *n* or less than 100', and since this would result in the falsity of (8), Hull concludes that the indefiniteness of (8) is in fact due entirely to '*n*-small'.[8] But this is fallacious. For now we are back to the same use-mention confusion that affects Deas's original argument. Precisifying '*n*-small' is irrelevant here. It is ''*n*-small'' that occurs in (8), and the referent of this term is already perfectly precise: ''*n*-small'' refers to the predicate '*n*-small'.

Perhaps one could press Hull's point here by relying, not on (A), but on the following, stronger version of Fine's criterion:

(B) The indefiniteness of a statement is due entirely to a particular term if, and only if, precisifying other terms never results in a definite statement.

This would yield Hull's desired conclusion without fallacy: since (8) and the like become false upon precisifying '*n*-small', (B) implies that the indefiniteness of (8) and the like cannot be due entirely to 'vague' (regardless of whether it is due to '*n*-small' or to something else). But while I think (A) expresses a plausible thought, I would hesitate to accept (B). Consider a statement of the form

(9) *n* is small,

and suppose that *n* is a borderline case of 'small', so that (9) is indefinite. Suppose,

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inductive step with a sequence of 10^9–1 conditionals whose antecedents involve the variable-free singular terms '1-small', …, '10^9-small'.

[7] I say 'seems to agree' because Hull makes contrasting claims in this regard. In Section 2 he concedes that Deas falls prey to a use-mention confusion. However, Hull himself falls prey to the same confusion in Section 3 (see below).

[8] Hull says that this holds for all *n*, but that is mistaken. Once again, when *n* is borderline small, (8) is not indefinite but true, so precisifying 'small' cannot result in the falsity of (8). This can only happen when it is indefinite whether *n* is borderline small.

further, that *n* is also a borderline case of 'medium', and that our linguistic practices agree on the truth of

(10) If *n* is medium, then *n* is not small.

(This last supposition may be construed as a case of penumbral connection, in Fine's terminology.) If we precisify 'medium' so as to include *n* in its extension, then (9) becomes false. But is this a good reason to conclude that the indefiniteness of (9) is not entirely due to 'small'? That would strike me as absurd. Nor should we draw this conclusion from the fact that upon precisifying 'medium' as indicated, *n* ceases to be a borderline case of 'small', due to (10): by precisifying 'medium' we automatically make 'small' more precise, but the latter predicate remains vague. For example, if *n–k* is not included in the precisified extension of 'medium', *n–k* may still be a borderline case of 'small'.

Perhaps we could further refine Fine's criterion to take care of the complication? Consider:

(C) The indefiniteness of a statement is due entirely to a particular term *T* if, and only if, precisifying other terms without altering the extension of *T* never results in a definite statement.

This might work. But then we cannot rely on (C) to deny that the supposed vagueness of (8) is due entirely to the vagueness of 'vague'. For precisifying the extension of 'small' would turn 'small' into a non-vague predicate. And this would alter the extension of 'vague'.

3.

Finally, consider (iii). Here the point is that Sorensen's argument would prove too much, for it seems possible to create Sorensen-type sorites even for predicates that are paradigmatically precise. Hull offers one example:

(11) Approximately 0 is less than 1000.
If approximately *n* is less than 1000, then so is approximately *n*+1.
Therefore, approximately 10000 is less than 1000.

This is supposed to be a Sorensen-type sorites for the predicate 'less than 1000'. And since the predicate is perfectly precise, we are supposed to infer that such sorites are not reliable for the purpose of establishing the vagueness of the relevant predicate. Do we finally have a knock-down? I say we don't. In a Sorensen-type sorites for a given predicate term, the subject terms occurring in the premises and in the conclusion must be precise. Such terms are supposed to pick out a sequence of relatively indiscernible items that gradually move from the inside to the outside of the predicate's extension (or vice versa). We have seen that the term ''*n*-small'' is indeed precise for every *n*. But surely 'approximately *n*' is vague for every *n*. So surely (11) does not fit the bill. We have a sorites, but not a Sorensen-type sorites for 'less than 1000'. So the objection misfires.

We can, of course, re-write (11) so as to make it fit the bill. Here is one way of doing so:

(12) 0 is an *x* such that approximately *x* is less than 1000.
If *n* is an *x* such that approximately *x* is less than 1000, then so is *n*+1.
Therefore, 10000 is an *x* such that approximately *x* is less than 1000.

This is a perfectly regular Sorensen-type sorites. But it is a sorites for 'an *x* such that approximately *x* is less than 1000' rather than 'less than 1000', and there is no question that the former predicate is vague. If we wish, we can add that the vagueness of such a predicate is entirely due to the vagueness of the adverb 'approximately' (or to the vagueness of the adjective 'tiny', if 'approximately *n*' is defined as '*n* plus or minus a tiny amount'). This can be checked by Fine's criterion, in whichever form we take it. But such a qualification is unsubstantial. We were looking for a Sorensen-type sorites that would implausibly classify as vague a predicate that vague is not. And (11), construed as (12), is not one.

I conclude that we have not discovered any grounds for discounting the role of 'vague' in the indefiniteness exhibited by Sorensen's sorites. At least so far as that argument is concerned, I say: 'vague' is vague.

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