

Vagueness and 'Vague': A Reply to Varzi

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Varzi (2003) has recently joined a thread of arguments originating in an attempt by Sorensen (1985) to demonstrate that the predicate 'vague' is itself vague. Sorensen's conclusion is significant in that it has provided the basis for a subsequent effort by Hyde (1994) to defend the legitimacy of supposing higher-order vagueness. Varzi's contribution to this debate is twofold. First, contra earlier criticism by Deas (1989), he claims that Sorensen's result is sound so far as it goes. Second, he argues that despite this it cannot be used as Hyde wishes on pain of circularity. I am not interested in the latter argument – it is examined in Hyde (2003) – but rather wish to defend and elaborate Deas' criticism of Sorensen against Varzi's repudiation.

1.

Sorensen argues that what responsible for vagueness is the existence of cases to which a predicate neither definitely applies nor definitely does not apply. The indefinite cases – the cases to which a predicate neither definitely applies nor definitely does not apply – are typically referred to as *border* or *borderline* cases. According to Sorensen, 'there is general agreement that predicates which possess borderline cases are vague predicates' (1985, pp. 134-5). For example, the predicate 'small' is vague because it definitely applies to 0, definitely does not apply to 10^9 , but neither definitely applies nor definitely does not apply to integers in between. This indefiniteness lends plausibility to a typical version of the sorites paradox:

0 is a small number
 If n is a small number, then n+1 is a small number.
 Therefore, 10^9 is a small number.

Sorensen then introduces the predicate 'n-small', defined as applying to 'integers that are either small or less than n'. It should be clear that "'n-small" is vague' is true for values of n that are small, in virtue of the vagueness of 'small'. Yet it should also be clear that it is false for values of n that are not small, say 10^9 . Values of n in between, for which it is not clear whether they are small, will evidently produce borderline cases of 'n-small' with respect to the predicate 'vague'. Thus, given the 'general agreement' Sorensen cites above, it follows that 'vague' is vague. This leads to a sorites for that predicate:

'1-small' is vague.
 If 'n-small' is vague, then 'n+1-small' is vague.
 Therefore, ' 10^9 -small' is vague.

Deas' primary criticism of Sorensen's result is that any vagueness in the statements in the above argument can be traced to the term 'small' instead of the term 'vague'. This is the point that Varzi repudiates:

Some commentators (for instance Deas 1989) have objected to this line of reasoning. After all, the vagueness ... is really not a feature of 'vague' but – indirectly

– a feature of 'small'. This is a fair remark. However it is hardly a relevant objection to Sorensen's argument: certainly 'married to a bald man' is truly a vague predicate, even though its vagueness is entirely parasitic upon that of 'bald'. (1989, p. 296.)

The problem is that Varzi here seriously misrepresents Deas' argument. Or, at best, the view the former discards as irrelevant is not a view that the latter has defended. For Deas' point is not that the vagueness of 'vague' is parasitic upon the vagueness of 'small'; rather, it is that the vagueness in the *purported proof* is due to the vagueness of 'small'. He argues that 'vague' itself is not vague, parasitically or otherwise. And, as we shall see, the relation between 'vague' and 'small' in Sorensen's argument is not at all analogous to the relation between 'married to a bald man' and 'bald'.

2.

While Deas does use the term 'parasitic', he uses it to characterize the relation between Sorensen's two sorites paradoxes, and not the relation between 'small' and 'vague'. The characterization is based upon his belief that the following biconditional holds true:

'n-small' is vague iff n is small.

Now if this biconditional is true, it is clear in what sense Sorensen's second sorites would be parasitic: it would amount to no more than a convoluted restatement of the first. Varzi rightly criticizes this Deas biconditional, pointing out that when it is *indefinite* that n is small it is *true* that 'n-small' is vague. Hence, on any interpretation of biconditionality that makes it false when one side is indefinite and the other true, this claim is erroneous. However, the biconditional is not the only basis for Deas' conclusion.

In Varzi's purportedly analogous example, parasitic vagueness results from one predicate being a constituent of another. The predicate 'bald' is a constituent of 'married to a bald man'; therefore, it makes sense that the vagueness of the former can lead to that of the latter. But, in the statements Deas is criticizing, it is obvious that 'small' is not a constituent of 'vague'. Consequently, there is no equivalent reason to expect that the vagueness of the first will result even indirectly in the vagueness of the second.

Moreover, as Deas takes pains to point out, 'n-small', though itself a predicate, appears (in single quotes) as *the subject term* in the statements in the problematic sorites paradox. This point is critical, for it lays bare a fundamental oversight in Sorensen's argument. The 'general agreement' upon which he depends – 'that predicates which possess borderline cases are vague predicates' – is mistaken. For it may be the borderline case which is responsible for the borderlity (if I may be permitted a neologism), and not the predicate. As Deas puts it:

The crucial question is what the predicate in such a sentence is predicated *of*. If it is something sharply defined (like a number) then Sorensen is justified [I]f,

however, the subject is somehow left indeterminate or ambiguous, that gives us an alternative place to lay the blame, without impugning the predicate. (1989, p. 30.)

For example, the following two sentences are effectively synonymous, and equally vague in virtue of the expression 'large', regardless of whether that expression appears in the subject or the predicate:

1000 is a large number.

A large number is 1000.

Of course, in Sorensen's sorites the term 'small' is not used but mentioned in the subject term of his sentences: it appears in quotes. However, as we shall see in the sequel, we can nonetheless pinpoint it as the source of vagueness. In short, the expression responsible for the existence of a borderline case need not occur in the predicate. Consequently, the major premise in Sorensen's argument for the vagueness of 'vague' is false; his argument is not sound.

3.

It is apparent, therefore, that Varzi has very much misconstrued the substance and relevance of Deas' critique of Sorensen. If philosophers such as Hyde desire a sound foundation for arguments supporting higher-order vagueness, they will have to look elsewhere. Still, a significant issue remains unsettled. We have seen that the vagueness in Sorensen's second sorites paradox *could be* due entirely to the term 'small' and not the term 'vague'. But so far we have no reason to be sure that it *is* all due to the former. That is, we have not ruled out the possibility that 'vague' provides an independent source of vagueness.

Fine (1975, pp. 272-74) suggests a means of resolving this: if the indefiniteness of a statement is due entirely to a particular term, then precisifying that term should remove all the indefiniteness. If we redefine 'n-small' to mean 'less than n or less than 100', it should be clear that all statements of the form "'n-small' is vague' become definitely false: there no longer are any borderline cases, and there no longer is a plausible sorites paradox.

Furthermore, it is possible to create a Sorensen-type sorites even for predicates that are paradigmatically precise. Let 'approximately n' be defined as 'n plus or minus a tiny amount'. We can now construct the following sorites paradox:

Approximately 0 is less than 1000.

If approximately n is less than 1000, then approximately n+1 is less than 1000.

Therefore, approximately 10000 is less than 1000.

Clearly the first premise is true and the conclusion false. In between there are values, e.g. approximately 1000, that result in borderline cases: the predicate 'less than 1000' neither

definitely applies nor definitely does not apply. Finally, note that the major premise is just as plausible as the claims 'If n is tiny, then $n+1$ is tiny' and 'If n is tiny, then $n-1$ is tiny'. For if n minus a tiny amount is less than 1000, then $n+1$ minus a tiny amount+1 (also a tiny amount) will also be less than 1000. And if n plus a tiny amount is less than 1000, then $n+1$ plus a tiny amount-1 (also a tiny amount) will also be less than 1000.

But 'less than 1000' is a paradigmatic example of a precise predicate. Hence, Sorensen's argument proves too much: were it sound, there would be *no* precise predicates; the term 'vague' would become trivial. On the other hand, if 'vague' is to remain substantively discriminatory with respect to predicates, we are forced to conclude that his second sorites paradox depends entirely on the vagueness of 'small'.

In short, the argument against which Varzi defends Sorensen – that 'vague' is parasitically vague but vague nonetheless – is not the argument advanced by Deas. And Deas' criticism of Sorensen's major premise – that the vagueness of a statement is compatible with the absence of vagueness in its predicate – is never addressed by Varzi. Finally, we have discovered independent grounds for discounting any role for the term 'vague' in the indefiniteness underlying Sorensen's sorites. At least so far as that argument is concerned, 'vague' is not vague.

References

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