Why Evans' Indeterminacy Puzzle Should Not Puzzle Us

Gareth Evans (1978) constructed a famous argument against the possibility of metaphysical indeterminacy which goes a follows:

(1) Ind. (A=B)
(2) Det. (A=A)
(3) Thus, A has a property which B does not (the property of being determinately identical to A)
(4) From 1,2, and 3: Det. –(A=B)
(5) From 1 and 5: contradiction

In my presentation, I want to argue that, depending on one's interpretation, this argument is either (i) superfluous, or (ii) incorrect.

The logical interpretation of Evan's argument.

There are, arguably, two different logical types of indeterminacy: one gradual and one disjunctive.[1] We can call the former *vagueness*, and the latter *indecisive indeterminacy*. Vagueness is the kind of indeterminacy that shows itself in sorites reasoning, where gradual change makes it impossible to form non-arbitrary determinate judgements, whereas indecisiveness is the kind of indeterminacy that appears in, for instance, split-future cases, where the indeterminacy is undecided between two (or more) determinate options.

This split between logical types of indeterminacy gives two different interpretations of Evans' argument. Under and indecisive interpretation premise (1) turns into the following:

(A=B) or –(A=B)

On this interpretation, premise (2) does not yield (3). After all, both of the disjuncts in (1) (interpreted indecisively) are fully coherent with A being determinately identical to itself. Thus, the incoherency never sets in. Now, some might argue that in indecisive indeterminacy both disjuncts are simultaneously true, or that no decision has been made as to which one is true. However, under both these interpretations we already have a state of contradiction in (1) without introducing (2), since two mutually exclusive options are simultaneously true/undecided. Thus, under an indeciveness-interpretation, Evans' argument either creates no incoherency or simply restates the logical tensions already present in premise (1) as stated on its own.

But what about vagueness? A case is vague if we cannot form non-arbitrary determinate judgments about it. For instance, we can imagine an object X being inbetween red and orange. The fact that we cannot non-arbitrarily say that X is red (or not red) proves that we are dealing with vagueness. A common way of vagueness is the modal view[2]. On this view, the indeterminacy operator is understood analogously (or near analogously) to the possibility operator of modal logic. The idea is that a vague representation can be precisified (i.e. made determinate) in more than one way, and that the indeterminacy comes from it being undecided which member of the resulting set of admissible precisifications is the *right* precisification. This makes vague representations determinately true relative to a given precisification (just like statements about possibilities are true/false relative to possible

[1] See Sider (2001), Eklund (2013) and Parfit (1984) for various articulations of this view.
[2] See Barnes (2010) for an extended discussion. She argues, there and elsewhere, that metaphysical indeterminacy can be fully understood as metaphysical modality.

worlds). In other words: instead of it being vague whether X is red, the modal view reduces "X is vaguely red" to "X is determinately red or not red relative to various admissible precisifications of 'red'".

Now, since the modal view (a version of which also appears to have been Evans' view) reduces vagueness to indeciveness, it cannot be used to make Evans' argument meaningful (for the reasons stated earlier). Thus, it seems, Evans' argument either fails or is uninteresting under both the vague and the indecisive interpretation.

Against the modal view.

The problem with the modal view is that it does not take seriously the deep difference between indecisiveness and vagueness. Our concept of 'red', for instance, is vague because any attempt to define 'red' in a determinate fashion feels arbitrary. One way of explaining this is to say that any determinate precisification of a vague concept only gets things *partly* right. Imagine that there are exactly ten admissible precisifications of 'red' such that we get a set S of precisifications P1 through P10. Now, according to each of these precisifications, there is a sharp determinate line demarcating red from other colours. The problem with these precisifications, however, is that they are all open to counter examples; we feel, somehow, that every admissible precisification of a vague concept both gets things right (that's why it is admissible) *and* gets things wrong (that's why choosing it over others feels arbitrary).

Now, for many philosophers, the consequence of this line of argument has been the abandonment of logical bivalence in favour of fuzzy or three-valued logic. I do not intend to enter into this debate in my talk. The point I want to make is simpler: real vagueness cannot be reduced to indecisiveness without the loss of what makes vagueness sorites-susciptable (namely its resistance to non-arbitrary precisification). This, in turn, should make us wary of the modal view and whatever consequences it has for Evans' argument.

Vagueness and self identity.

The notion of self-identity is often taken to be a basic logical notion. However, I want to suggest that when faced by vagueness, the notion breaks down. Consider the modal view. Despite it failing to capture the true essence of sorites-susceptible indeterminacy, it does get one thing right: vagueness can be represented in a variety of equally acceptable ways. In other words, for every vague phenomenon, there is a set of admissible representations of that phenomenon, each of which are equally (yet not fully) veridical - any representation of a vague phenomena can be, at most, *partly* right. As a result, a statement such as 'A=A', where 'A' represents a constitutively vague phenomenon, is indeterminate between various options in which different admissible representations of A are substituted for 'A' on either side of the identity sign. The result is the break-down of such self identity statements. The argument goes, roughly, as follows:

(6) If X is vague, then there is a set Sr of equally (but not fully) veridical representations of X: {R1, R2…. Rn}.
(7) In identity-statements involving X we can substitute any member of Sr for any other without loss of representational accuracy.
(8) From (6) and (7) we thus get such absurd results as: R1=R1 and R1=R2 and R1=R3 etc.

This might seem strange, but since we have no way of privileging one description of a vague phenomenon over another (so long as they are all members of the set of al equally admissible descriptions), self-identity statements involving vague objects are not as straight-forward as they are with determinate objects (where there is no set of representations that disagree on the constitutive

porperties of the objects, yet are equally accurate). In fact, this shows how the notion of self-identity makes sense only if we are talking about objects with clear and well-defined borders to begin with. This, in turn, falsifies (or, at the very least, problematizes) premise (2) of Evans' argument. If the indeterminacy of premise (1) is the result of A being a constitutively vague object, then it makes no sense to claim that A is determinately identical to itself (since there is no privileged description, and hence no metaphysical state that clearly defines exactly what A is to begin with[3]). On this view, the problem with Evans' argument is not that premise (1) and (2) form a contradiction, but that (2) is false if A designates a vague object.

Conclusion.

Evans' argument is either uninteresting, produces no contradiction (if the indeterminacy is indecisive) or is false (if the view of vagueness I have proposed here is right). Thus, it should not be considered a central problem for our understanding of indeterminacy.

Note that I have not, in this document, differentiated clearly between metaphysical, semantic and epistemic indeterminacy. This, and the connection between views about semantic and ontic indeterminacy will be explored more deeply in the actual talk (primarily by use of the notion of representational veridicality).

References:

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Sider, T. (2001), "Criteria of personal identity and the limits of conceptual analysis", *Philosophical Perspectives* 15, 2001, pp.189-209

[3] Given some sort of veridicality requirement on the relevant representations.