

Vagueness, Belief Forming, and Similarity Constraints

ABSTRACT

Once we decide to resolve the sorites paradox by denying the major premise, the question arises why we were so inclined to believe it in the first place. It has been argued that contextualist theories of vagueness can answer this question in a satisfactory way, while competing theories cannot. However, once we observe that this question has to do with belief forming rather than extension determining, a gap is exposed in the contextualist argument, and it becomes clear that the kind of principle invoked in order to answer the question is insufficient. Moreover, there is an alternative kind of principle which provides a neat answer the question without putting any significant semantic restrictions on the theory and thus is available to virtually any vagueness theorist. Hence, this way of arguing for contextualism about vagueness fails. Some concluding remarks on the possibility of saving the argument by appeal to a general principle of charity; it turns out that its application is problematic in cases like this.

0. Preamble

My purpose in this paper is to argue that a certain way of motivating Contextualist theories of vagueness (broadly conceived) fails. I will start with an outline of (parts of) Delia Graff Fara's account of vagueness as presented in her 2000 paper 'Shifting Sands: An Interest-Relative Theory of Vagueness'.¹ I will not be concerned with the more specific details of her Interest-Relative theory; rather, I will focus on the more general features which Fara herself claims to be available to a wide range of theorists which may be labelled Contextualist in a broad sense. In particular, I will focus on a certain kind of *contextualist linking principle*. Such principles are what link the designated contextual parameters to the semantics, typically by stating that the extensions of vague predicates may vary with these parameters. According to Fara, principles of this kind – especially her own Salient Similarity Constraint – provide a neat answer to the puzzle raised by the denial of the major premise of sorites arguments: If this premise is false, how come we find it so compelling in the first place? Therefore, theories that entail such principles are preferable to theories that do not. Or so the argument goes. In what follows I will argue that this line of reasoning is flawed.

1. The three questions

Fara characterises the sorites paradox in terms of the mutual inconsistency of individually plausible sentences of the following form:

¹ All page references below are to this paper.

- (A) Fa (B) $(\forall x)(\forall y)(Fx \ \& \ Rxy \rightarrow Fy)$
 (C) $\neg Fz$ (D) $(\exists b_1 \dots b_n)(Rab_1 \ \& \ Rb_1b_2 \ \& \dots \ \& \ Rb_{n-1}b_n \ \& \ Rb_nz)$

(Here, ‘ F ’ is a vague predicate, a is a clear case of ‘ F ’, z is a clear non-case of ‘ F ’, and ‘ R ’ is some (similarity) relation making B and D plausible.) In order to solve the puzzle, Fara gives up the truth of B, the sorites sentence. She immediately notes that this strategy gives rise to the following questions:

1. *The Semantic Question.* If the universal generalization ‘ $(\forall x)(\forall y)(Fx \ \& \ Rxy \rightarrow Fy)$ ’ is not true, then must [the “sharp boundaries” claim, ‘ $(\exists x)(\exists y)(Fx \ \& \ Rxy \ \& \ \neg Fy)$ ’, a classical equivalent of its negation] be true? (...)
2. *The Epistemological Question.* If ‘ $(\forall x)(\forall y)(Fx \ \& \ Rxy \rightarrow Fy)$ ’ is not true, why are we unable to say which one (or more) of its instances is not true – even when, say if the F in question is ‘is a tall man’, all the heights of the possible values of x and y are known?
3. *The Psychological Question.* If the universally generalized sorites sentence is not true, why were we so inclined to accept it in the first place? In other words, what is it about vague predicates that make them seem tolerant and hence boundaryless to us? (p. 50)

With regard to the Semantic Question (henceforth SQ), Fara happily accepts the sharp boundaries claim, and she devotes the last part of her paper to argue for its compatibility with borderline cases. In what follows, I will focus on Fara’s treatment of the Psychological Question (henceforth PQ), and to some extent the Epistemological Question (henceforth EQ).

Fara goes on to give a brief description of the most popular theories of vagueness on offer, namely Supervaluationism, Epistemicism, and Degree-Theories. She finds the two first incomplete since they (according to her) fail to provide an adequate answer to PQ, while Degree-Theories are taken to be inadequate because of their reliance on the unexplained notion of degrees of truth. The moral is that another kind of account is called for. This is why she is sympathetic to Contextualist theories of vagueness, i.e., theories that appeal to the context-dependence of vague predicates in order to answer PQ. Thus, even though she does not definitely put herself in the Contextualist camp, her own account is taken to be motivated in a similar way, i.e., through providing a neat answer to PQ:

Since like Sainsbury I take apparent tolerance and boundarylessness – rather than borderline cases – to be the defining features of vagueness, I want an account that is geared

to address the Epistemological and Psychological Questions I posed, since in effect, answering both of these questions requires us to explain *why* vague predicates seem tolerant to us, even though sorites reasoning shows us that they cannot be. (p. 54)

In what follows, I will focus on Fara's treatment of PQ. I will argue that since her own account does not give a satisfactory answer to PQ, it is incomplete in the same way as its competitors in this respect. This in turn means that the main rationale for preferring an account like Fara's is undermined.

2. *The Bare-Bones Account*

Fara's own account "unfolds in layers", the first of which is called the *Bare-Bones Account* (henceforth BBA). The main idea is that although we have some leeway in our standards of use for vague predicates, there are certain constraints. Firstly, we have *Clear-Case Constraints*: "For each predicate, there will be only a limited range of cases which it will be permissible to count as positive instances. (...) For each predicate there will also be a class of things which it will be mandatory to count as positive instances." (57) Secondly, there are *Relational Constraints*: "[W]hatever standard is in place for 'tall', anything the same height as or taller than something that meets the standard itself meets the standard." (57) Thirdly, there are *Coordinate Constraints*: "[W]hatever standards are in use for 'rich' and 'poor', nothing can meet both, and it must be possible for something to meet neither." (57)

So far, the kinds of constraints proposed are widely accepted and uncontroversial. But it is the fourth, more controversial *Salient Similarity Constraint* (henceforth SSC) that is to do the work in providing an answer to PQ:

[W]hatever standard is in use for a vague expression, anything that is saliently similar, in the relevant respect, to something that meets the standard itself meets the standard; anything saliently similar to something that fails to meet the standard itself fails to meet the standard. (p. 57)

Given that we construe contexts broadly enough to include whatever parameters making similarities become salient, SSC is a kind of contextualist linking principle: it links certain designated contextual parameters to the semantics of vague predicates via the claim that the extensions of the former may vary with the latter. Since the endorsement of such principles are what makes mainstream contextualist theories (like Soames's [1999], Raffman's [1994, 1996] or Shapiro's [2003, 2006]) deserve to be called contextualist in the first place, it is

natural to take Fara's argument to support mainstream contextualist theories in general. It is also quite clear that this is what she takes her argument to accomplish. This means that the argument, and thus a rejection of it, is relevant not just to the assessment of Fara's own account, but to (mainstream) contextualism about vagueness in general.

My purpose here is not to argue against SSC. Rather, I want to pose an internal objection: even if these constraints are accepted, Fara's theory cannot deliver the results it should according to her own standards. Thus, I will not be concerned with the justification of SSC, but rather jump directly to Fara's claims about what can be achieved with the resources given so far.

Consider again the generalised sorites sentence B:

$$(B) (\forall x)(\forall y)(Fx \ \& \ Rxy \rightarrow Fy)$$

Fara's account is based on the idea that the very act of evaluating an instance of B raises the similarity of the pair to salience. Thus, given SSC, the very act of evaluating an instance of the major premise has the effect of rendering true the very instance we are considering. This idea – that *boundary-shifting* occurs with respect to the extensions of vague predicates – follows from SSC (and bivalence). Boundary-shifting is also the key to answering EQ and PQ:

We cannot find the boundary of the extension of a vague predicate in a sorites series for that predicate, because the boundary can never be where we are looking. It shifts around. In answer to the Psychological Question, we may say that it is no wonder that we were so inclined in the first place to regard the universal generalization as true, given that any instance of it we consider is in fact true at the time we consider it. (p. 59)

Again, my purpose here is to pose an internal objection to Fara's account. Thus, I will not question the idea that evaluation of an instance may cause the boundary to move due to changes in some designated (contextual) parameter.

According to Fara, then, adopting SSC – or a theory that entails it – gives us an advantage to many other theories of vagueness since it provides the resources to answer both EQ and PQ in a satisfactory way. This is where my concessions to Fara end. In the next section I will argue that since SSC fails to deliver the promised results, she has given no good motivation for preferring theories entailing it.

3. *Truth and belief-forming*

The first thing to note is that SSC is a principle concerning the truth-value of the instances of B, while PQ is a question concerning belief forming. It should be obvious that the truth of an instance of B is not enough in itself for us to form the belief that it is true. Unless we also have a premise saying that we tend to form true beliefs when we consider instances of B, SSC alone does not really answer PQ.

Secondly, an alternative principle without any straightforward semantic implications seems to do the job quite well:

(BF) If two things are saliently similar, we tend to form beliefs according to which one of them falls under a vague predicate iff the other one does.

A principle like BF gives a straightforward explanation of why we tend to believe B: for each instance we consider, the similarity of that pair is raised to salience by the very act of evaluating, and so we tend to form the belief that the instance is true. And if we choose to go with BF rather than SSC, there is no need to appeal to boundary-shifting; the boundary may be fixed even though the similarity of different pairs is salient to us at different times. In other words, we may suppose, with Fara, that the sorites sentence is false, and suppose, contrary to Fara, that there is a fixed boundary in the series. It may still be the case that the boundary is hidden from us due to the salient similarity of each pair at the moment of consideration.

We seem to have found two problems with SSC. Firstly, SSC is insufficient to answer PQ on its own. Secondly, accepting SSC leads to unnecessary semantic commitments. Let us take a closer look at these problems. With regard to the first problem, what kind of additional principles would be needed in order to answer PQ by invoking the conjunction of SSC and these principles? Well, if SSC is going to play any role at all, they better be such that the conjunction of SSC and these principles guarantees something like the following: the salient similarity of the pairs under consideration entails that we will tend to form the belief that they fall in the same semantic category. (The truth of the relevant instance may or may not be invoked as a middle step.) But then it is hard to see how SSC could give a satisfactory answer to PQ without additional premises which – together with SSC itself – would entail BF.

The second problem is related to the first, and may be spelled out as follows. SSC cannot answer PQ without principles p_1, \dots, p_n such that the conjunction of SSC and p_1, \dots, p_n would entail BF. So, any way of supplementing BBA with the required principles

would lead to a theory BBA', such that BBA' entails BF. Yet another theory would result from substituting BF for SSC in BBA; call this new theory BBA". Now, BBA fails to answer PQ, so it is not even a viable contender according to Fara's own standards. BBA' and BBA" fare equally well when it comes to answering PQ. However, BBA" is a weaker theory since BBA' entails BBA" but not vice versa. Moreover, BBA" does not entail SSC, and so is more semantically neutral than BBA'. It follows that as long as our prime concern is to answer PQ, the semantic commitments of theories like BBA or BBA' are unnecessary – there is a semantically more neutral alternative available for anyone who feels a pressing need to answer PQ, namely BBA".

Now, recall that the main motivation for preferring BBA – or theories entailing it – to the other theories, was its ability to answer PQ. This motivation seems now to have been undermined. Moreover, BF, and hence BBA", provides a neat answer to EQ: we cannot find the boundary since we do not believe it to be anywhere where we are looking. No need to appeal to boundary-shifting here either. We also get an explanation of why the boundary is hidden from us, so no extra work is required to sustain this idea.

To sum up: If our main concern is to provide an account of vagueness that can give a satisfactory answer to PQ and EQ, we should go with an account that entails BF, rather than an account that entails SSC. Moreover, note again that while SSC entails boundary-shifting, BF is compatible with theories that allow for contextually invariant boundaries. In fact, BF does not seem to put any interesting constraints on the semantics at all. It seems compatible with Supervaluationism as well as Degree-Theories, and it seems to fit particularly well with Epistemicism. Fara's introductory remarks concerning these competing theories can be seen as an attempt to give an argument from elimination: since none of the leading theories of vagueness can give a satisfactory answer to PQ, they are out of the picture, and only accounts entailing something like SSC – i.e., accounts entailing contextualist linking principles – can count as serious candidates. Among these we find various Contextualist theories, and of course, Fara's own Interest-Relative account. If the foregoing remarks are correct, Fara's argument from elimination fails.

In conclusion, theories that are claimed to have a nice answer to PQ because they entail some contextualist linking principle similar to SSC should be reassessed in this respect, since, as we have seen, principles that concern truth-values or extensions are insufficient without further principles. Principles like BF give us all we need in order to answer PQ and EQ without committing us to any semantic principles entailing something like

boundary-shifting. So, the reason that Fara gives for preferring her own account, or Contextualist theories in general, is undermined.

It is worth repeating that the principles that make them Contextualist in the first place are typically contextualist linking principles, like SSC. This means that Fara's line of argument should be available to any Contextualist about vagueness. Moreover, since it is meant to support the most central and uniquely defining principles of this kind of approach, it would, if successful, single out Contextualism as a particularly strong candidate for dealing with the problems of vagueness, since it alone would be able to answer PQ. However, as I have tried to show above, Fara's argument is flawed. Our desire to answer PQ provides no reason to stick to these principles since weaker, non-contextualist principles like BF seem to fare better in this respect. And since BF seems available to virtually any theory of vagueness, demanding an answer to PQ does not seem to put any interesting constraint on theorising about vagueness at all. Thus, *a fortiori*, such a demand does not constrain the range of available theories to Contextualist ones.

I will close with some brief remarks in order to address a possible objection to my arguments above. The objection would go like this: Yes, there is obviously a logical gap between what we believe and what is true, but this does not mean that we should not prefer theories that make our belief-forming mechanisms come out as reliable to theories that render them unreliable. The default assumption should be that we tend to form true beliefs when we employ our ordinary belief-forming mechanism, and with this assumption in place, Fara's argument seems to have some force after all. The forming of the relevant kind of beliefs should, when possible, be explained in terms of their correctness.

There are two problems with this reply. Firstly, it is not so clear that contextualists of this kind are in a position to appeal to charity in order to justify their accounts. While they do tend to make speakers come out as correct in their judgements about borderline cases, they also tend to make speakers come out as incorrect when it comes to judgements about other speakers' judgements. It is natural to take competent speakers of vague languages to be reliable when it comes to judging the correctness of other speakers' judgement, and it is also natural to assume that such speakers also take themselves to be reliable in this sense.

Now, the first problem for the contextualist is that the fine grained contexts she appeals to make it harder for speakers to share a context, and whenever the contexts two speakers are in are relevantly different, the judgements they make about certain borderline cases will differ. Hence, unless they realise that they are in relevantly different contexts, they

will make incorrect second-order judgements about each other's first-order judgements, and wrongly take these second-order judgements to be correct. For instance, Bill might judge Jane's judgement that the car is red as incorrect since he judges the car to be non-red. It seems that Bill is just as warranted in taking his first-order judgement to be correct as he is in taking his second-order judgement to be correct. However, on the contextualist picture, his first-order judgement is correct, while both his second-order judgement and his belief that this judgement is warranted to the same degree as the first-order judgement are incorrect. This is not very charitable. This problem is more pressing for theories that entail that vague predicates are judgement-dependent, while the second problem is more general.

The second problem concerns appealing to charity in accounting for vagueness. I do not wish to deny that trying to be charitable is *prima facie* methodologically sound. However, I do not think that it is a very good methodology to apply across the board when we are dealing with the sorites paradox. After all, it seems that our usual ways of reasoning and belief forming land us in a contradiction. In particular, we tend to form the belief that the major premise – in its usual non-contextualised form – is true. Even according to Fara (and all other contextualists), something *does* go wrong when we apply our ordinary belief forming methods to the sorites.

More specifically, I do not think that the principle is obviously correct when it comes to judging the status of borderline cases. To illustrate, suppose that there is a sharp boundary in each context (not necessarily the same in every context). Why should we assume that the methods we have for classifying things as falling on one or the other side of the boundary are reliable? Assuming that our cognitive capacities have evolved in a way that makes them truth conducive in *these* cases seems clearly unwarranted, perhaps even absurd. It should be clear that we are unable to locate the (supposed) boundary. This is just a data point, providing one of the few common grounds for theorists of vagueness. Given this fact, it seems very natural to deny that we can reliably form beliefs about the classification of objects close to the boundary. And once this natural step has been taken, there is no reason to prefer theories that explain our tendency of forming *this* kind of beliefs via their correctness to theories that do not. If this is right, then, we cannot motivate the principles at the heart of contextualist theories of vagueness – SSC or any other contextualist linking principle like it – by appealing to their (alleged) ability to handle the psychological question in a satisfactory way.

References

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