

Vagueness-related Partial Belief and the Constitution of Borderline Cases

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I

For all post-1970s effort expended on the topic, the most central and important question about vagueness—*what it is*: what, specifically, something's being a borderline case of a vague expression consists in—has seldom been tackled with the theoretical explicitness necessary if issues expectably downstream of it, like the nature of valid inference among vague statements, or the Sorites paradox, are to receive a properly motivated treatment.¹ The great interest of Chapter V of *The Things We Mean* (together with Schiffer [1998], [2000] and [2000b]) is that it points the way towards a new kind of approach, according to which vagueness is constitutively a *psychological* phenomenon, grounded in the characteristic propositional attitudes of practitioners of vague discourse. It's uncontroversial that a vague expression is one whose presence in a sentence contributes towards there being, at least in principle, situations which present borderline cases of its truth; for Schiffer, it is the status of such a situation as a borderline case that is grounded in the characteristic psychology of thinkers who appraise the sentence in that situation.

Sorites-prone concepts—*red*, *tall*, *bald*, *child*—are typically associated with a proper comparative: *redder than*, *taller than*, *balder than*, *less mature than*. Presented with a Sorites series initiated by paradigms of these concepts and well ordered under the associated comparative, competent practitioners will normally experience gradually decreasing confidence in the predications of the concept concerned, culminating perhaps in a case or cases where they are as drawn to a verdict as to its negation, and then a gradual reinstatement of confidence in the opposite verdicts, culminating in a resolute willingness to deny predications of the concept concerned. This claim may involve certain simplifications of the actual sociology of judgement in borderline cases, but the basic phenomenon: that borderline cases of the kinds of vague concepts listed are essentially manifested not in consensual silence about them nor agreement that there is “no fact of the matter”, but in weakening of opinion

¹ Epistemicism is not open to this complaint.

and then strengthening of contrary opinion, seems solid. This observation—that vagueness is characteristically associated with a kind of *partial belief*—is the springboard of Schiffer's whole approach.

II

Partial belief—believing in a way that involves less than full conviction—is of course a pervasive phenomenon, and nothing especially to do with vagueness. So, initially at least, the prospects of its yielding a constitutive account of borderline cases might seem remote. What improves them, in Schiffer's view, is that—with a qualification I shall come on to—the kind of partial belief associated with vagueness—what Schiffer calls VPB, or *v-belief*—is *sui generis*. Schiffer suggests several respects in which *v-belief* contrasts with the traditional, well-studied kind of partial belief. The latter—what he calls standard partial belief (SPB, or *s-belief*)—is the kind of attitude of which examples are “your believing to some degree or other—i.e. more or less firmly—that you left your glasses in your office, that it will rain tonight, or that the Atlantic City Flounders will win the Super bowl.” (p. 200).²

Some of the features advanced by Schiffer as characteristic of *s-belief* and lacking in the case of *v-belief* are these:

- (i) That it would be open to us to *s-believe*, even if our language were perfectly precise.
- (ii) That *s-belief* is a measure of one's uncertainty about the truth of some matter, and hence an expression of a degree of *ignorance*.
- (iii) That standard partial beliefs generate likelihood beliefs: thus if I *s-believe* to some quite high degree that I have a spare pair of glasses in my office, then I will believe (absolutely) that it is *pretty likely* that I have a spare pair of glasses in my office.
- (iv) That in standard cases where one *s-believes* some proposition to some degree intermediate between certainty and certainty-that-not, one would typically regard oneself as *not being in the best possible position to take a view* on the truth value of the proposition in question, even if one has no doubts about the quality of the (limited) evidence that one possesses.

Standard partial beliefs are of course characteristically treated as subjective numerical probabilities, and are supposed to be subject, where rational, to the laws of the classical probability calculus. But even if one is, for whatever reason, dubious about their assignment of precise quantitative measure, the considerations marshalled by Schiffer do seem to open up a whole plethora of disanalogies with the kind of partial belief that seems to be operative over vague judgements. When I find myself less confident than I was before, as a march-past of successively smaller soldiers goes by, that the men now before me are tall, it is not that I think there is some further fact about their tall-

² All numbered page references are to Schiffer's chapter.

ness, or lack of it, for which I am in context restricted to imperfect evidence; and the idea that the men at this stage are *less likely* to be tall than their predecessors seems like some kind of conceptual solecism,—in stark contrast, for example, to the idea that they are less likely to be more than 5' 10". Relatedly, I may regard myself as being in a relevantly unimprovable position for judging whether they are tall or not, and my uncertainty seems to have nothing at all to do with the notion that my evidence, although unimprovable, is less than would be needed to settle the matter.

It is clear that Schiffer is on to something. However the foregoing considerations do not provide the kind of *functional* characterisation of v-belief that its load-bearing role in Schiffer's treatment demands. But he offers a crucial additional consideration. Consider the example of the plucking of the hairs of Tom Cruise (p. 202 and following.) Suppose that, each time a single hair is plucked, Tom also gains a gram of body fat—or whatever quantity is necessary in order for his passage from slimness to corpulence roughly to match his rate of progress from a full head of hair to baldness. Let the process have reached a borderline stage for each transition and consider the propositions

- (1) Tom is fat
- (2) Tom is bald
- (3) Tom weighs more than 220 lbs
- (4) Tom has fewer than 7,000 hairs on his scalp

Imagine you have no means of weighing Tom and are not in a position to count his hairs. You are accordingly uncertain about all four propositions. What will be your attitude to the two conjunctions:

- (5) Tom is fat and Tom is bald
- (6) Tom weighs more than 220lbs and Tom has fewer than 7,000 hairs on his scalp?

Well, suppose you reckon your chances of correctly accepting either of the precise claims—the conjuncts of (6)—no better than 0.6. Then, assuming their independence, you ought to reckon that your chances of being right about the conjunction are no better than 0.36—at least from the standpoint of the classical probability calculus. So (if pressed) you should be inclined to accept either (3) or (4) individually but to reject (6). And even prescinding from precise probabilities, the intuitive thought is compelling—or should be—that since your merely visual evidence for (3) and (4) individually provides only a moderate, readily improved-upon grounding for either claim, you

will be compounding your risk in any view you take about their conjunction. You may incline to the view that Tom now weighs more than 220lbs, and incline to the view that Tom has fewer than 7,000 hairs; but if you are rational, and these opinions are each marginal, you will be much more squeamish when invited to endorse (6).

However no analogue of this point would appear to apply to the vague conjunction (5). Here, it seems, there is no rational requirement that the credences placed in the individual conjuncts should “multiply down”. A thinker who regards each of the conjuncts, (1) and (2), as borderline but is inclined, in a suitably qualified and hesitant way, to accept them both, can be expected to take the same view of the conjunction—that it is, on balance, just about acceptable—and, intuitively, is open to no complaint of irrationality in doing so. So the kind of partial belief characteristic of vagueness would seem to be distinguished from standard partial belief—classical credence—by *failing to conform to the laws of classical probability*. Schiffer’s own suggestion is that vagueness-related partial belief is structured in accordance with the patterns exhibited by the Łukasiewicz matrices for (continuum) many-valued logics, with conjunction and disjunction, for example, taking respectively the minimum and maximum values of their components, rather than being determined as product and sum.

III

Note that if Schiffer’s proposals about the attitudinal psychology of vague judgement are correct, even in outline, a new and serious objection to epistemicism emerges. If vagueness is as classical epistemicism conceives it, then the difference between the two precise claims, (3) and (4), and the two vague claims, (1) and (2), in the double Sorites considered above is only that in the case of the latter we are ignorant of the principles that determine the sharply bounded extensions in which the epistemicist believes—ignorant of the nature of the sharply extended properties that “bald” and “fat” respectively denote. In all four cases, therefore, we are making judgements in a state of uncertainty, induced by insufficiency of evidence, about determinate matters. So the kind of partial belief induced as we enter the range of hard cases should correspondingly be the same: it should be *standard* partial belief throughout. Since, if Schiffer is right, it isn’t, epistemicism would appear confounded by the attitudinal psychological facts.

IV

All this, of course, presupposes that the notion of VPB is in good standing, and that it is indeed a sufficiently natural and pervasive aspect of vague judgement to promise a constitutive explanation of the phenomenon. How does Schiffer foresee such an explanation as proceeding?

When a vagueness-related partial belief in a proposition P is formed under conditions which are *epistemically ideal* for the purpose of appraising P, Schiffer terms the v- belief in question a *VPB**. His strategy is then to seek a biconditional with

x is a borderline case of being F

on one side and some appropriate clause embedding the notion of *VPB** on the other.³ Apparently he would have liked to propose something like this:

x is a borderline case of being F if and only if someone could V*-believe that x is F,

but he considers that although the “only if” direction is acceptable, the converse—right to left—conditional fails. That someone could V*-believe that x is F is not sufficient, in his view, for x’s being a borderline case of F—not if borderline status is in turn understood as something peculiar to the kind of vague concepts with which he is concerned (pp.208-9). What, he thinks, the possibility of V*-belief that P *does* signal is merely that P is afflicted with some kind of *indeterminacy*. The problem is that being a borderline case of a vague concept of the intended kind is only *one kind* of indeterminacy. So, he concludes, the condition needs strengthening.

That Schiffer believes that it is a more general notion of indeterminacy, rather than vagueness proper, that is associated with the possibility of v*-belief would seem to be clear from his endorsement of formulation (C), on p.209:

(C) P is indeterminate if and only if someone could v*-believe that P.

But the matter is clouded by his remarks about ‘schmadulthood’ (p. 212), where “the concept of a schmadult is exhausted by these two conditions: anyone who has reached his or her 22nd birthday is a schmadult, and anyone who has not yet reached his or her 17th birthday is not a schmadult.” Here, Schiffer suggests, if considering someone we know to be 19 years of age, “we might well not v-believe that she is a schmadult but rather s-believe that it is not true that she is a schmadult and not true that she isn’t a schmadult”. Such a case of mere incomplete definition, and the indeterminacy it generates, thus apparently contrasts with the target case of vagueness proper precisely because it may induce a response of *s-belief* in the existence of a gap, rather than v-belief in the appropriate proposition about schmadulthood and its negation. This is puzzling: if the kind of indeterminacy spawned by incomplete definition is not characteristically associated with v*-belief, what is the

³ Supposing a true such biconditional can be found, the task will still remain of justifying the claim that it can be seen as *constitutive*—as giving an account of that wherein borderline case status consists. But the first job is to find a formulation that is true.

motive for thinking that *v**-belief is associated with other forms of indeterminacy besides vagueness proper?

Schiffer, in my opinion, is right to insist on a contrast between vagueness proper and semantic indecision generated by incomplete definition. But I don't think he is right, as far as his own explanations go, to dissociate the latter from VPB. To see this, take another concept of the same structure—say 'schmall', where it is given that an individual is not schmall if they are more than six feet tall, that they are schmall if they stand less than five foot six—and suppose that Tim, our 19-year-old, stands five feet ten. If one has, in these circumstances, any kind of partial belief in the propositions: "Tim is a schmadult" and "Tim is schmall", it seems clear that it's a kind of partial belief that doesn't "multiply down". After all, one's level of confidence in the conjunction, "Tim is a schmadult and Tim is schmall", will presumably be no less than in each conjunct. This, then, seems to be an example where indeterminacy of a kind contrasting with vagueness proper *is* associated with VPB. That somebody might be inclined simultaneously to s-believe that there is "no fact of the matter" in such cases—or, as Schiffer expresses it, to s-believe that it is not true that P and not true that not P—doesn't seem to be in any tension with this. Indeed there seems no reason why the same shouldn't happen with vagueness proper: confronted with a "plumb" borderline case of red and orange, there seems no clear reason why a subject might not v-believe "x is red" and "x is orange" to equal degrees, while at the same time s-believing that there is no "fact of the matter" about which colour it is. It may well be that the latter belief would be philosophically unfortunate, or confused; but a propensity to v-belief is not, presumably, an inoculation against philosophical confusion.

It seems to me therefore that, Schiffer's remarks about *schmadult* notwithstanding, VPB and VPB* *are* characteristic of a wider class of forms of indeterminacy. Whether or not (C) is correct as it stands, a true biconditional with "x is a borderline case of being F" on one side and some clause suitably exploiting the notion of VPB* on the other can be nothing so simple.

V

Schiffer's proposal is that vagueness proper is marked by *v*-belief which is *F*-concept driven, where a *v*-belief—more accurately, VPB*—is, he defines, *F*-concept driven if one is in ideal circumstances for judging *x* to be *F* and one's concept of being *F* precludes one from s-believing to any positive degree either that *x* is *F* or that *x* is not *F* and determines one to v-believe to some positive degree that *x* is *F*. On this basis, Schiffer proposes:

- (E) *x* is a borderline case of being *F* iff someone could have an *F*-concept driven VPB* that *x* is *F*.

One immediate concern about this is that it is not clear why v-belief in circumstances of indeterminacy generated by partial definition would not count as F-concept driven by the terms of Schiffer's formulation—for it doesn't seem wrong, for all that has so far been explained, to say that my concept of being a schmadult precludes me from s-believing to any positive degree that a 19 year old is a schmadult or that she is not a schmadult, and does determine me to v-believe to some positive degree that she is a schmadult.

But there seems to be a more fundamental problem about the direction which Schiffer has taken. Part of the content of (E) is that a borderline case of a property F is something for which it is *possible* to have a VPB* in the proposition that it is F. It is instructive to consider a little further why such an account would be insufficient—why there is the need for an additional condition which Schiffer's introduction of F-concept drivenness is meant to address. One reason of course is whatever cause there is to think that other kinds of indeterminacy besides vagueness are associated with v-belief. But there is a consideration that would apply even if there were no such kinds. It is that v-belief, if it is characterised purely by points of contrast with s-belief that pertain just to its *out-rules*, so to say—to its characteristic manifestations—may always, as a matter of metaphysical possibility, occur under *any kind of circumstance whatever*,—so under circumstances quite unrelated to vagueness. Someone might, for example, be physically so constituted as to form VPBs in response to successive propositions of the form, “Tom now has fewer than fifteen thousand hairs on his scalp” in the plucking example. Or I might form a VPB in relation to the proposition that it will snow tomorrow, purely as a result of a neurological disorder. So any constitutive account needs to say something more. And the more that needs to be said must somehow place controls on the *provenance*—the in-rules—of v-belief. That is exactly what F-concept drivenness seems to be intended to do. Witness Schiffer's talk of the concept “precluding” some and “determining” others among possible attitudinal responses.

However, if that is right, then the approach confronts a dilemma:

(Horn 1) If one's concept of being F—the way one understands the associated predicate—really can *constrain* one's responses to putative instances in the way involved in the idea of F-concept drivenness, precluding s-belief and determining v-belief, then it becomes difficult to see how the leading aspect of Schiffer's constitutive proposal, that vagueness is a psychological phenomenon and is somehow constituted in our propensities to v-belief, can be upheld. For now it seems that those propensities in turn are driven by ulterior aspects of our concepts, that is, by ulterior aspects of the way we understand the expressions in question. If the very same psychological state of partial belief may be generated in different ways, and is a phenomenon of vagueness

only in some cases, when appropriately “driven” by the concept concerned, then—or so an opponent of the psychological account may insist—we should be looking to what it is about the concept in question that precludes s-belief and determines v-belief if we want to say something constitutive about what borderline case vagueness is. V-belief will be an *effect* of vagueness, and so unsuited to provide the basis for a constitutive account.

(Horn 2) If, on the other hand, one’s concept of being F cannot really *enforce* one’s attitudinal response in the way suggested by the idea of F-concept drivenness, then v-belief—even when it amounts to VPB*, that is, when it is formed under conditions of ideal understanding and information—still cannot play the constitutive role that Schiffer wants. It cannot do so not so much because it may naturally and normally also occur in cases of different kinds of indeterminacy, but because it may, as a *sui generis* psychological phenomenon, in principle occur in *any* kind of circumstances, and in connection with any kind of predication.

The dilemma, in brief, is that if the vagueness of the relevant concept is conceived as *leading* the response of v-belief, as the terminology of “F-concept drivenness” suggests, then it cannot be constituted by it. But if v-belief, even when “F-concept driven”, is in no real sense led by the character of the predicated concept, then it may in principle occur—as a mere metaphysical possibility—in association with any kind of judgement whatever, and so is unfitted to underwrite a *necessarily* true biconditional of the kind needed for the sort of account Schiffer seeks.

This dilemma should certainly not be fatal to all prospect of a constitutive account of vagueness in terms of attitudinal states. But it needs a clear response.

References

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