



10

Vague Intensions: A Modest Marriage
Proposal*Jc Beall*

The hard nut of vagueness arises from two strong appearances:

- *Full Tolerance*. There are no cutoffs. If x and y stand in some tolerance relation with respect to (vague) F , then they both satisfy F or neither does.
- *Utility*. Vague predicates cut genuine distinctions in the world; they are useful in truly describing the world.

There are no accounts of vague expressions that preserve both appearances, at least in the given simple forms.¹ What makes vagueness hard is the great strength of those appearances *coupled with* their apparent joint inconsistency. Utility demands cutoffs; Tolerance prohibits cutoffs.

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The given tension is crystalized in the sorites puzzle.² Tolerance forces us to say that everything satisfies F if anything does; but that would make F useless, thereby rubbing against—indeed, rubbing out—Utility. As Graham Priest (2003) puts it, ‘[t]he sorites phenomenon . . . arises simply because we are forced to recognize the existence of cutoff points where both common sense and philosophical intuition scream that there are none.’ Let a *sharp predicate* be a predicate that admits ‘cutoffs’ (e.g. some shift of semantic value along its range of application, or a sorites series, or etc.).³ Priest’s point, then, is that the sorites forces us to say that our ‘vague’ predicates are sharp where both common sense and philosophical intuition scream that they aren’t.

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Standard responses to the sorites reject Full Tolerance (so understood) and attempt to explain why we find cutoffs so counter-intuitive. In this chapter, I pursue a different

For comments and discussion, I thank Dominic Hyde, E. J. Lowe, Graham Priest, Greg Restall, Stewart Shapiro, Achille Varzi, Brian Weatherston, Robbie Williams, Crispin Wright, and participants in the Arché vagueness workshop. Thanks, too, to colleagues at the University of Connecticut, especially Don Baxter, Tim Elder, John Troyer, and Sam Wheeler. Thanks, finally, to the work of Sebastiano Moruzzi and Richard Dietz, who not only organized very interesting workshops but also edited this volume.

¹ I am also assuming normal extensional connectives.

² I skip a rehearsal of the sorites. See Moruzzi and Dietz’s Introduction to this volume.

³ Throughout this discussion, I use ‘sharp’ as above. (Notice that ‘sharp’, so understood, needn’t be classical.)



course. I shall assume that our language contains vague predicates, and that such predicates (or expressions, in general) are essentially fully tolerant. The question concerns what our language is like if vague predicates are essentially (fully) tolerant, and in what way, if any, such predicates might be useful. In effect, the project is a modest one: to give a plausible reconstruction of what our language is like if vague predicates are fully tolerant. One desideratum is to have a framework in which other standard approaches to ‘vagueness’ (e.g. contextualism, supervaluationism, subvaluationism, epistemicism) find a place—at least in broad outline. Of course, since standard proposals reject Full Tolerance (though many admit different, more limited notions of tolerance), such proposals will not be seen as accounts of *vague expressions*, since the guiding assumption is that vague expressions are essentially fully tolerant. Still, such accounts are accounts of some vagueness-related phenomenon, and a desideratum of the project is to have such accounts naturally find a place in the overall, broad picture.

My proposal, like the project, is modest. In short, vague predicates are essentially fully tolerant, and so without cutoffs, and so, for that reason, Utility fails for *vague* predicates. On the other hand, there is a genuine sense in which vague predicates (their intensions) are useful: they provide sharp lookalikes—sharp, homonymous relatives—of the vague. In a sense, nihilists (very generally construed) about vague predicates are right; however, non-nihilist, more standard accounts are also right, but not about *vague* predicates, which are essentially fully tolerant and, so, without cutoffs.

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The chapter remains at a very abstract level, and is intended to be brief.⁴ The next few sections sketch the proposed framework: Section 10.1 states, in abstract terms, what vague intensions are like; Section 10.2 specifies satisfaction conditions for such predicates; Section 10.3 addresses the issue of Utility, and how it fits into the proposed framework; and Section 10.4 discusses the place of standard accounts of ‘vagueness’ in the sketched framework. Section 10.5 briefly summarizes the (admittedly abstract) picture, and Section 10.6 provides replies to a few objections. Section 10.7 offers a few closing remarks.

10.1 VAGUE INTENSIONS QUA FULLY TOLERANT

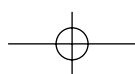
The intensions of sharp predicates yield *unique* extensions; they are, or may be modeled by, functions—for simplicity, functions that take a predicate to a unique extension.⁵

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What of vague predicates, which, by assumption, are essentially fully tolerant? My suggestion is that, unlike the intensions of sharp predicates, vague intensions yield

⁴ This chapter is a very slightly revised version of a brief but ‘big picture’ talk at St Andrews (2004). The aim of the talk was modest, and this chapter, as above, retains the modest aim.

⁵ The thought may be generalized in the usual way, so that the given intensions are functions from worlds to sets of objects, or to ‘truth values’ or etc. I simplify by just talking about intensions as taking predicates to extensions. (If the sharp predicate is non-classical, then the given intension will similarly assign a unique antiextension.)





many extensions; they are (or may be modeled by) non-functional relations, relating their arguments to many extensions. Concentrating on atomic sentences, the idea, in a nutshell, is as follows.

FN:6 The vague intension of F is a relation ρ that relates F to (many) extensions.⁶ In particular, ρ ‘determines’ some ‘core extension’ of F but also relates F to other extensions that are ordered by inclusion. (Think of some initial ‘core set’ \mathcal{E}_0 , which comprises a bunch of objects in a soritical series. Then \mathcal{E}_1 is a superset of \mathcal{E}_0 comprising ‘the next’ element, and \mathcal{E}_2 a superset of \mathcal{E}_1 comprising the next, and so on.) Intuitively, ρ strives to be fully tolerant, strives to be all-inclusive. A picture:

- Let \mathcal{R}^F be a tolerance relation with respect to predicate F , and let ρ relate F to \mathcal{E}_j , that is, $\rho(F, \mathcal{E}_j)$. If $x_1 \in \mathcal{E}_j$ and $\langle x_1, x_2 \rangle \in \mathcal{R}^F$, then $x_2 \in \mathcal{E}_{j+1}$ and $\rho(F, \mathcal{E}_{j+1})$, where $\mathcal{E}_{j+1} = \mathcal{E}_j \cup \{x_2\}$.

The ‘all-inclusive’ nature of a vague intension ρ , so understood, ensures that for any element x of a soritical series, x finds itself in some extension to which ρ relates a vague predicate. It is precisely that feature of vague intensions—their abundant tolerance—that distinguishes them from sharp predicates.

What distinguishes vague predicates from sharp predicates is that the former have (non-functional) relations as intensions; they relate a predicate to more than one extension, where the given extensions are ordered by inclusion, guided by ‘tolerance’, as above. The suggestion is not that vague intensions have a parameter for contexts or the like; those, at least on standard treatments, are simply more functional relations (viz., functions with a parameter for context or the like). The proposal, rather, is that vague intensions are *non-functional*, and that the various extensions, to which such intensions relate a predicate, are ordered via inclusion—driven by the vague intension’s quest for tolerance.

It should be clear that, as hoped, sharp intensions may be seen as a special case of our (overly generous) vague intensions. In short, sharp intensions are simply ‘cut off’ vague intensions; they are relations from predicates to a unique extension. In short, sharp intensions are functional relations; they are special, cut off cousins of the broader—and, again, wildly generous—vague intensions. (I will return to this.)

10.2 SATISFACTION AND TOLERANCE

The big question, of course, concerns satisfaction conditions for vague predicates, which conditions, in turn, dictate ‘truth conditions’ (at least for atomics). Here, there are two salient options.⁷

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⁶ I write $\rho(F, \mathcal{E}_i)$ to indicate that ρ relates F to \mathcal{E}_i , where $\mathcal{E}_i \subseteq \mathcal{O}^n$, with \mathcal{O} a non-empty domain of objects. As above, one can just as easily—and perhaps more plausibly—say that ρ relates worlds (or whatever) to the various extensions, but for simplicity I will just say that ρ relates a given predicate to various extensions.

⁷ It’s interesting to think about variations on these options, but towards keeping this chapter short, I skip such discussion and go only with the two salient options.





- *Fregean*: a predicate F is satisfied by x iff x is in the *unique* extension of F .
- *Liberal*: a predicate F is satisfied by x iff x is in *an* extension of F .

If we follow the Fregean condition, we will say that, (apparently) contrary to appearance,⁸ no genuinely vague sentence—that is, a sentence using genuinely vague, fully tolerant predicates—is true. If we go with the Liberal intuition, we will wind up saying that all vague sentences are true.

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I will go with Frege. No vague sentence is true, since no vague intension yields a unique extension, contrary to the demands of the Fregean truth conditions.⁹

[FN:9]

What is important to notice is that, on *either* route, we get Full Tolerance: we have no sharp boundaries in either case. On the Fregean approach, we hardly get cutoffs when no vague predicates are satisfied—all premises (and conclusion) of a sorites argument will have the same semantic value (*viz.*, untrue). On the liberal approach, we get no cutoffs for the same reason, although now all premises and conclusion are true.

What is also worth noting is that, again, the above satisfaction conditions cover the *general* case (*viz.*, vague predicates) and the special, cut off case (*viz.*, sharp predicates). The Fregean approach, which I'm assuming, requires a unique extension. As such, sharp predicates, whose intensions are functions, are candidates for truth (as it were), while vague predicates, having non-functional intensions that yield more than one extension, are not candidates for truth. On the Liberal approach, vague predicates are candidates for truth, since the only requirement is some extension or other, in which case sharp predicates, which always have a unique extension—and, so, some extension or other—are likewise candidates for truth. So, again, the framework is one in which standard, sharp predicates are merely a narrow, special case of the broader (and overly generous) vague predicates.

Before turning to the issue of Utility, it is worth briefly addressing the issue of negation. On either the Fregean or Liberal approach, one might wonder whether inconsistency arises. The answer, of course, depends on the logical behavior of negation. As I am assuming the Fregean approach to satisfaction conditions, there are two basic options.¹⁰ One is to treat negation as exhaustive, in the sense that A or $\neg A$ holds for all A (vague or otherwise). If disjunction is normal, then the exhaustive approach yields that $A \vee \neg A$ is valid.¹¹ Defining falsity to be truth of negation (*i.e.* A is false

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⁸ In the next section, I suggest that the appearance is really an appearance of something else, in which case the apparent conflict is only apparent.

⁹ Braun and Sider (2007) have recently defended a 'Fregean view', according to which no vague sentence is true or false. They aim to answer Utility via complicated pragmatic principles and a version of supervaluationism. I will take a different route, although ultimately the Braun–Sider view, like (I hope) other accounts of 'vague' expressions, will naturally find a place within the overall framework.

¹⁰ The Liberal approach, which, for brevity, I am setting aside, will likely require a paraconsistent negation, at least if symmetry of sorites arguments is to be respected. (See Moruzzi and Dietz's introductory chapter for issues of symmetry.) This is not the only option, but it is likely the most natural.

¹¹ NB: sometimes, the term 'exclusive' is used for the target negation behavior, with the idea that such a negation 'excludes gaps'. I think that the term 'exhaustive' is more appropriate, since such a





just if $\neg A$ is true), this approach would have it that, for any vague A (which, given Fregean satisfaction conditions, is not true), A is false since $\neg A$ is true. The other approach is along Strong Kleene (SK) lines, wherein negation toggles truth and falsity but is fixed at any other ‘semantic value’. In the current context, the SK approach would have it that the ‘semantic value’ of A is the same as A if A is vague—namely, ‘untrue’.

For present purposes, I think that either approach is viable given the ‘Fregean’ assumption on satisfaction. On the other hand, given that most sorites arguments have both a ‘positive’ and ‘negative’ version, it seems that symmetry pushes for the SK approach. So, that is the approach that I’ll assume—though, as mentioned, the chief aim of this chapter doesn’t force one approach over the other.¹² In addition to SK negation, I will assume a basic SK framework, in which our extensional connectives are ‘normal’.¹³

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With an SK approach to negation (and extensional connectives, generally), coupled with the proposal above, we have it that no vague sentence is true or false. The obvious question, then, concerns the appearance of Utility (see Section 10.1).

10.3 UTILITY

As above, we have Tolerance; however, we *lose* Utility. How can vague predicates be useful if they’re never true (or, derivatively, false) of anything? The short answer is that they can’t be useful, at least not useful for purposes of expressing true claims!¹⁴ Admittedly, one might try to salvage Utility by invoking complicated pragmatic mechanisms; however, I will explore another route.¹⁵

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Instead of trying to preserve Utility via pragmatic mechanisms, I suggest a different, twofold route towards making sense of the appearance of Utility.

- First, find some other way in which vague intentions are useful (towards the aim of expressing true claims, and so on);
- Second, trace the strong appearance of Utility to something other than vague predicates, something related to vague predicates but not vague predicates.

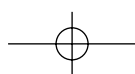
negation, assuming normal disjunction (which is standardly assumed), serves to cut two exhaustive categories—the true and untrue.

¹² The SK approach will have it that Fa is false exactly if a is in the *unique anti-extension* of F . (I leave use-mention to context here.)

¹³ For an elementary discussion of some of the standard, non-classical options, see Beall and van Fraassen 2003.

¹⁴ The matter is less clear on the liberal approach; it depends on what one says about negation, and also the general logic. As above, I am assuming the ‘Fregean’ approach, and so will ignore Liberal issues.

¹⁵ I should note that putting the full burden of Utility on pragmatics, which, I take it, is the approach of Braun and Sider (2007), seems to me misguided, since pragmatic ‘goals of assertion’ will likely reinvigorate the initial tension between Tolerance and Utility, where these are now reformulated in terms of the given ‘goals of assertion’. But I set this aside, in an effort to keep this chapter short.





Given that vague predicates are essentially (fully) tolerant, they're not useful in the Utility sense; they don't cut distinctions in the world, and are generally not capable of truly describing the world (at least given the 'Fregean' approach to satisfaction, which I'm assuming). The above, twofold route towards accommodating the appearance of Utility calls for finding *some other job* for the vague predicates—in particular, their intensions—to do towards achieving a useful language. In turn, the above route calls for explaining the strong appearance of Utility, with respect to vague predicates, as an appearance of something else—some other class of predicates that, unlike our (essentially fully tolerant) vague predicates, do satisfy Utility.

Following the above course, my suggestion is that we understand the service of vague predicates—in particular, their intensions—as affording many riches that serve to give us genuinely useful predicates. In particular, what makes vague intensions useful is not that they cut distinctions in the world or are otherwise employable in true descriptions; rather, their intensions give us—what may well, in some cases, appear to be arbitrarily drawn—*useful, sharp* predicates, predicates that do have cut-offs in virtue of (as it were) *forcing* a well-behaved (functional) intension. In other words, while vague predicates aren't useful for truly describing the world, since they aren't true (or false) of anything, they are useful: their intension yields a plenitude of extensions that, in turn, yield *sharp* predicates, ones that are intended for cutting distinctions, ones that have a unique extension and, so, are capable of being true along Fregean lines.

How is the appearance of Utility preserved in all of this? While our vague predicates are essentially tolerant and thereby buck Utility, the *appearance* of utility is none the less preserved via look-alikes, sharp predicates that are homonyms of the vague. Such homonyms, I suggest, are what we typically—but erroneously—call 'vague predicates'. Such sharp look-alikes are what we normally use in our daily, true descriptions of the world, and it is them—not their vague progenitors—that reflect Utility.

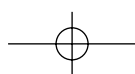
How do our vague intensions give birth to the given sharp offspring? One—among many—ways in which we might get sharp offspring from the vague intensions is as follows. (See §5 for other accounts.) Let F be a vague predicate the intension of which yields various extensions \mathcal{E}_i , as in §2. A *sharp descendent* of F , which I'll write ' F^* ' (even though, in our real language, the two are homonymous), naturally emerges.

- x is in *the* extension of F^* exactly if x is in $\bigcap \mathcal{F}$, where \mathcal{F} comprises each \mathcal{E}_i such that $\rho(F, \mathcal{E}_i)$.

So, for example, while the vague intension of 'is tall' yields too many extensions to make the (vague) predicate useful in cutting distinctions, one quickly gains a sharp and useful relative of 'is tall'—for clarity, call it 'is tall*'—by generalized intersection: something is tall* exactly if it is in every extension of 'is tall'.¹⁶

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¹⁶ The similarity with supervaluational approaches to 'vague predicates', I hope, is obvious. Note, however, that there's no hint of invoking other languages or other valuations; instead, the idea is that our Tolerant vague predicates yield all the requisite resources for sharp, useful ones—all within the same language. Moreover, and more importantly, there's no need to define 'supertruth' as the





The suggestion, then, is that while vague predicates afford no cutoffs, they none the less afford sharp ‘lookalikes’ that, in virtue of being sharp, immediately yield cutoffs. We think that vague predicates are not only Tolerant but Useful (i.e. satisfy Utility); however, we are conflating the Tolerant vague predicates with their Useful—but non-Tolerant—sharp relatives.

This raises the question of what to make of ‘rival’ accounts of ‘vague’ predicates (or expressions, generally), and also raises the prospect for a marriage of nihilists (very broadly construed) and non-nihilist, standard accounts.

10.4 MARRIAGE: NIHILISTS AND NON-NILHILISTS

- Q1 The modest proposal is that if, as herein assumed, vague predicates are Fully Tolerant, they fail to give us Utility; however, they none the less play a role in providing Useful—and, hence, non-Tolerant—predicates. The appearance of Utility for vague predicates is merely an *appearance*; it arises from conflating the sharp offspring of the vague with their fully tolerant, vague progenitors.

The proposal, then, affords a sense in which nihilists about vagueness are right, but non-nihilists—in effect, standard theorists about ‘vagueness’—are also right. In effect, nihilists maintain that vague predicates are essentially (fully) tolerant, and hence are utterly useless, or at least don’t satisfy Utility—cutting distinctions in the world via cutoffs.¹⁷ On the current proposal, nihilists (at least broadly conceived) are right about vagueness. On the other hand, non-nihilists may also be right; it’s just that they’re right about something else, some vagueness-related but non-vague fragment of our language. In particular, non-nihilists—inasmuch as their accounts yield cutoffs and, hence, are non-Tolerant—may be seen as giving an account of the sharp offspring of our vague predicates, not an account of vagueness itself.

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What are standard theorists of ‘vagueness’ doing? If, as suggested, our vague predicates—in particular, their intensions—yield useful, sharp offspring, there’s a question about how such ‘offspring’ behave. What is the right theory of *them*? It is *this* question, in the end, towards which standard, non-nihilist accounts of ‘vagueness’ are aimed. Such accounts tell us how the sharp *offspring* of the vague work, how their logic or semantics goes.

To see as much, consider that each of the standard three (non-nihilist) approaches, qua account of ‘sharp offspring’, finds a natural place in the proposed framework, at least from a sufficiently abstract—and, admittedly, simplified—point of view. How do the sharp offspring come about? How do they work? Here are standard options, very broadly construed.¹⁸

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aim of assertion. Truth itself remains the aim, and we never properly assert vague claims—since they’re one and all untrue. It’s the sharp offspring of vague predicates that we use in proper assertion. (Thanks to Achille Varzi for discussion on this point.)

¹⁷ For versions of nihilism, not all of which would fully subscribe to this characterization, see Wheeler 1979 and Unger 1979. [On my rather crude characterization, Braun and Sider (2007) would count as nihilists too, at least on my understanding of their position.]

¹⁸ Other accounts, like Weatherson’s (2005), can also find a place, I think.





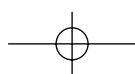
- E1. Supervaluational. Vague intensions provide the material (viz., a bunch of extensions) for a sharp predicate that is defined via generalized intersection: where F is our vague predicate, we have F^* the extension of which is the generalized intersection of all of F 's extensions.¹⁹
- FN:19**
- E2. Contextualism. Vague intensions provide the material (viz., a bunch of extensions) for a sharp predicate that is sensitive to context: the (unique) extension of F^* , relative to a context c , is exactly one of F 's many extensions, namely, the one 'selected' in c (where the details of such 'selection' depends on the exact, contextualist account). (See Graf 2000; Raffman 1996; Shapiro 2006)
- E3. Epistemicism. Vague intensions provide the material (viz., a bunch of extensions) for a sharp predicate the (unique) extension of which, is unknown to us, and perhaps in principle unknowable to us. (It *might* be that *how* the sharp predicate arises out of the vague predicate's material is similarly unknown, perhaps unknowable.) (See Sorensen 2001; Williamson 1994)

While the foregoing is only crudely sketched (and obviously far from exhaustive!), it is clear that such standard stories may be seen—at least abstractly—as giving accounts of the 'sharp offspring' that emerge from our overly generous, fully tolerant vague intensions. The usual versions of such stories, of course, all aim to be giving accounts of *vague intensions* (vague predicates); however, each such account encounters the screams of 'philosophical intuition' as each gives up Full Tolerance by admitting inevitable cutoffs—inevitable, because such accounts purport to preserve Utility for their target predicates. What I suggest, however, is that they needn't and shouldn't give up the full tolerance of vague predicates. The current (admittedly modest) suggestion is that we can have our Full Tolerance for genuinely vague predicates; what we must recognize is that such 'standard accounts' are really just accounts of the sharp homonyms of vague predicates—the sharp and Useful predicates that fall out of fully tolerant vague ones.

In some sense, then, the current proposal affords a marriage of nihilists (very broadly conceived) and their non-nihilist 'rivals'. The former are right about genuinely *vague* intensions, and the latter provide candidate theories of the sharp offspring of the vague. Our vague intensions give us everything we need to get our useful, sharp predicates; and the non-nihilist, standard theories tell us how such sharp predicates work.

I have said nothing about which account of our useful (sharp) predicates, (E1)–(E3), is correct, and I have little to offer on that score. Indeed, I am not sure that exactly one of the given standard accounts is right; it might be that more than one is right, that we have various different kinds of sharp predicates that have emerged from the vague. I leave the matter for future debate.

¹⁹ As mentioned in §4, this is along the lines of a supervaluationist account (Fine 1975, Keefe 2000, Varzi 1999), though it needn't exactly be supervaluationism, for reasons given above (in an earlier footnote). Importantly, there needn't be any appeal to supertruth—certainly no conflating 'supertruth' and truth. NB: the so-called subvaluationist approach also finds a place within the framework. Here, the subvaluationist denies F^* as per above, but now switches to the Liberal truth conditions for sharp predicates! (For subvaluationism, see Hyde 1997, and for discussion Beall and Colyvan 2001.)





What I think is worthwhile about the proposed framework is that, while modest, it gives us a way to have Tolerance and have useful predicates. There is no one phenomenon that yields both Full Tolerance *and* Utility—a point on which all parties, as far as I know, agree. The ongoing complaint against standard ‘accounts of vagueness’ is that they ignore the essential feature of full tolerance—no cutoffs. My modest suggestion is that, irrespective of our account of (the derivative) sharp predicates, we need not give up Full Tolerance. Vague intensions are not by themselves useful for describing the world, but they are useful in affording predicates for the job.

10.5 SUMMARY OF PROPOSAL

The hard nut of vagueness is the grating tension between two strong appearances: namely, Full Tolerance and Utility. The former precludes cutoffs; the latter demands them. The standard course is to give up on Full Tolerance in favor of Utility.

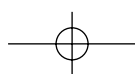
Nihilists, at least very broadly conceived, buck the standard course. They take full tolerance to be essential to vague predicates. If R^F is a tolerance relation for vague F such that $xR^F y$, then both or neither of x and y satisfy F . The result, of course, is the loss of Utility.

No one phenomenon satisfies both Full Tolerance and Utility, at least as the terms are used here. The current proposal suggests that the appearance of Utility emerges from vagueness-related phenomena, namely, the sharp offspring of our fully tolerant vague intensions. The hard nut of vagueness is resolved by accepting that, for vague predicates, there are no cutoffs, just as ‘common sense and philosophical intuition’ demand. Nihilism, then, is partly right, but it is rejected as the full story. We also have Utility; it’s just that Utility is achieved via the sharp predicates that emerge from our overly tolerant vague predicates. It is those predicates, the sharp offspring of the vague, on which much standard work on ‘vagueness’ has focused; it’s just that such work needs to be re-conceived. In short, the screams of common sense and philosophical intuition are misplaced when directed at standard accounts, since such accounts are accounts of sharp predicates (or expressions, generally). Nobody should scream at cutoffs if the predicates are sharp.

The proposal, of course, remains very abstract, with few details given. The aim has been only to gesture at a framework that, as far as I know, has been neglected, a framework that might resolve the long-standing ‘screams’ by providing, in some sense, a marriage of two very different approaches: nihilist and non-nihilist, standard accounts of ‘vagueness’. Yet, even at the abstract level, objections arise. I close by answering a few objections.

10.6 OBJECTIONS AND REPLIES

Objection. ‘Penumbral connections’ are central to vague predicates (Fine 1975). ‘If x is red, then x is not pink’ is a conceptual truth about redness and pinkness. But, on the proposed account, such connections are entirely lost.





Reply. The short reply is that such connections are not lost; they never governed genuinely vague predicates. What the given principles govern are the sharp relatives of vague predicates—the predicates that we typically use, and use in accord with the given principles. How, and to what extent, such principles hold is a pressing matter for accounts of the sharp offspring of the vague, and a matter to which most standard account of ‘vagueness’ (i.e. accounts of our sharp offspring) have much to say. What’s important, for present purposes, is that penumbral connections are connections among our Useful predicates, which, as said, are not the genuinely vague predicates but, rather, the sharp derivatives on which standard (non-nihilistic) accounts focus.²⁰

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Objection. You’ve preserved Full Tolerance, and you’ve done so in the only possible fashion: having no cutoffs. But while you don’t have *typical* cutoffs—some shift in semantic value—you still have a sort of cutoff: namely, the ‘core extension’ to which a vague intension relates a (vague) predicate. Why should the intension ‘yield’ *that* core extension, as opposed to some other—e.g. the next one?

Reply. I have no worked out answer to the question, but I also see no reason to think that an answer is required. Full Tolerance, as above, requires us to recognize something strange about how the language works. My suggestion is that the strangeness emerges via relational intensions—intensions that, as it were, ‘determine’ an initial extension but ‘keep going’. Admittedly, there is something apparently arbitrary in the way that such (relational) intensions keep going; but there is also something arbitrary at any point at which they would stop (were they to stop, contrary to fact). What is nice about the current proposal is that it preserves the insight that any of our sharp, ‘offspring’ predicates are, in some sense, arbitrarily drawn. What is also nice is that vague intensions, as here characterized, provide the resources for sharpness, however seemingly arbitrary they may be.

Objection. There is a related problem with the ‘core extensions’. Perhaps there is no need to speculate why this, rather than that, is the core extension that ρ relates to a vague predicate F . Even so, your ‘core extension’ still draws a boundary where, intuitively, vague intensions ought not draw boundaries. (See, e.g. Sainsbury 1997.)

Reply. The push for boundary-less intensions arises, I think, from what appear to be inevitable shifts of semantic value—there’s an x and a y such that $xR^F y$, but exactly one of x and y satisfies F . Such shifts are not part of the proposed account of vague predicates. A virtue of the present account is that, while there are indeed ‘boundaries’, at least in as much as there are extensions, no single such ‘boundary’ is privileged with respect to what makes a vague claim true. In that respect, there is a sense in

²⁰ The matter is actually more involved and largely turns on what sort of conditional is involved. I’ve been assuming a Strong Kleene setting for the overall language. As such, the only conditional with which to express ‘penumbral connections’ is the material conditional (the hook). Since vague predicates, according to the proposal, are one and all ‘gappy’, such a conditional wouldn’t do the trick; however, as above, the reply is that penumbral connections hold only for the sharp predicates. Whether a material conditional will work for such sharp predicates depends, in the end, on the account of sharpness (e.g. if they’re classical, then the hook might do the job).





which vague intentions are ‘boundary-less’, since any given extension is as good as any other, at least as far as the (ever-tolerant) vague intentions are concerned. (Such shifts, of course, are essential to the sharp offspring of the vague, which are our useful predicates.)

Objection. Your proposed marriage preserves Full Tolerance for vague predicates, predicates that are thereby Useless (fail to satisfy Utility). Utility, in turn, is achieved by the sharp offspring of the vague, predicates that enjoy cutoffs and, hence, buck Full Tolerance. Such sharp offspring, according to the proposal, are the predicates that we typically use—since, again, the vague predicates themselves are entirely useless (except for the material that they provide for sharp predicates). The problem, though, is that the so-called offspring of the vague—the predicates towards which standard (non-nihilist) accounts are directed—are useful in virtue of tolerance, as Wright (1975) pointed out. Wherein does this fit?

Reply. What Wright is talking about, of course, are our normal, sharp offspring of the vague. If Wright is right, then any account of those predicates will have to yield the sort of tolerance—far short of Full Tolerance—that is said to be required of such predicates. This is not an easy task, but it’s a task that, if Wright is right, must be met. That said, the requisite tolerance of our sharp predicates is not ruled out by the (modest) marriage. What is ruled out is that such predicates, given that they’re Useful, are fully tolerant, in the target sense (see Section 10.1).

What’s interesting is that, on the current account, there’s a straightforward way in which the sharp offspring, regardless of the exact account (e.g. E1, E2 or so on from Section 10.5), immediately achieve a sort of tolerance—perhaps just the sort that Wright requires (though only details would tell). Consider the initial example, from Section 10.4, of how we might get some of our sharp predicates, namely, the super-valuational approach. On this account (which, admittedly, remains entirely abstract), we have a vague intension ρ for (vague) F . ρ , being a vague intension, delivers a host of extensions for F . We get a sharp descendent of F , namely, F^* , via generalized intersection: x is in *the* extension of F^* exactly if x is in $\bigcap \mathcal{F}$, where \mathcal{F} comprises each \mathcal{E}_i such that $\rho(F, \mathcal{E}_i)$. What’s interesting is that F^* enjoys a natural sort of tolerance (though certainly short of Full Tolerance): for any x , if x satisfies F^* , and $xR^F y$ (i.e. stands in the vague predicate’s tolerance relation), then y is in some close extension of F . Given that, according to the going account, F and F^* are homonyms, it’s not surprising that we might think of F^* as tolerant—since it is, in at least the given respect.

Objection. Standard (non-nihilist) accounts, you say, can be wedded to a nihilistic account of vagueness (according to which, e.g. vague predicates are neither true nor false of anything), and then be seen as accounts of how the sharp (cutoff-carrying) predicates work. The trouble with this suggestion is that many such standard accounts typically strive to retain classical logic. A *marriage* of nihilism (understood as above) and some such standard account would *force* a non-classical logic, at least on the proposed ‘Fregean’ approach to satisfaction (that results in vague predicates being neither true nor false of anything), but perhaps also on the Liberal approach (on which all





FN:21 vague claims are true).²¹ So, the proposed marriage is doomed from the start, or at least not something into which the standard, classically driven accounts would happily enter.

Reply. It is true that, at least on the Fregean approach to satisfaction, the proposed marriage requires a non-classical logic. What to make of this depends on the arguments for classical logical theory, and I leave that topic for another venue. What should be noted is that, at least on the proposed Strong Kleene account, classical logic remains an extension (a proper extension) of the proposed logic. (In other words, if some argument is valid in SK, then it's classically valid.) This sort of situation allows for an entirely classical fragment (proper fragment) of the language, wherein the logic may be (in effect) entirely classical. The proposal, of course, is that any such classical fragment would at best involve the sharp offspring of our vague predicates; it wouldn't involve our vague predicates. Given that we normally use the sharp predicates—since the 'real vague' predicates are entirely useless (except for the material that they provide for our useful sharp predicates)—such a situation shouldn't be overly troubling to those who think that, for the most part, classical logic is 'right'.

Objection. It's plain that, on the proposal, the sorites puzzle is at best unsound if it uses genuinely vague predicates, since such predicates are neither true nor false of anything (at least given the proposed Fregean condition for satisfaction). But what of sorites that employ the normal, sharp offspring of the vague predicates? What is the reply?

Reply. The reply will depend on the preferred account(s) of sharp offspring. As said, the proposed framework, at least in the abstract, is largely compatible with standard accounts; it's just that they're not, in the end, accounts of *vague* predicates, but rather accounts of vagueness-related predicates (viz., the so-called sharp offspring). As such, a classical, epistemicist account of the sorites might be the response, or perhaps a standard supervaluational account. Some such account must be given, I agree, but the issue turns on which account of our normal, sharp offspring is ultimately accepted. In this chapter, I offer no arguments one way or the other on that matter. On the other hand, the proposal does have something to say about typical 'screams' against cutoffs: they are misplaced if directed against accounts of the sorites that involve *sharp offspring*. Being useful predicates, the sharp offspring obviously have cutoffs, and as such their respective sorites arguments will be at least unsound. But screams are misplaced. The only *fully tolerant* predicates are the vague ones—and they're thereby useless, except for providing the material for sharp offspring.

10.7 CLOSING REMARKS

Vagueness has gained a lot of attention in recent years. The sorites puzzle challenges us to arrest its slide without transgressing Full Tolerance—without requiring cutoffs.

²¹ As in Section 10.3, whether the Liberal approach requires a non-classical logic depends on the account of negation. If symmetry of sorites arguments is respected, then one will probably require a non-classical (paraconsistent) logic.





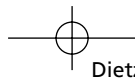
But that challenge is met only if vague predicates are Useless. The standard line is that vague predicates are obviously useful, and so we must find a way to explain away the strong appearance of Full Tolerance—accept cutoffs, but perhaps explain why they're hard to accept.

In this chapter I have suggested an alternative course: we may accept Full Tolerance (the absence of cutoffs) as a central feature of genuinely vague predicates, but explain the apparent Utility of such predicates as arising from something else—namely, sharp homonyms of the vague predicates. Genuinely vague predicates fail to be Useful in the usual sense, but they still provide a service; they provide the ingredients for cut-off intensions of (homonymous) sharp predicates. It is such sharp (homonymous) predicates to which typical (non-nihilist) accounts are directed.

The proposal, in the end, is very simple, but it is also potentially liberating. When we recognize that the pull of Full Tolerance and Utility is rooted in conflation—the conflation of vague predicates and their sharp (look-alike) offspring—the tension might well be diminished. There is still work to do on what sort of 'tolerance', if any, the sharp offspring may enjoy; but we know, in advance, that such tolerance will be short of Full Tolerance, which is enjoyed only by non-Useful, vague progenitors of our normal, sharp look-alikes. As such, we can expect cutoffs from accounts of the sharp look-alikes. At the very least, the site of such cutoffs is no place to scream.

References

- Jc Beall and Mark Colyvan (2001), 'From heaps of gluts to Hyde-ing the sorites', *Mind* 110: 401–8.
- Jc Beall and Bas C. van Fraassen (2003), *Possibilities and Paradox: An Introduction to Non-Classical Logic*, Oxford University Press, Oxford.
- David Braun and Ted Sider (2007), 'Vague, so untrue', *Noûs* 41: 133–156.
- Kit Fine (1975), 'Vagueness, truth and logic', *Synthese* 30: 265–300.
- Delia Graff (2000), Shifting sands: an interest-relative theory of vagueness', *Philosophical Topics* 28: 45–81.
- Dominic Hyde (1997), From heaps and gaps to heaps of gluts', *Mind* 106: 641–60.
- Samuel C. Wheeler III (1979), 'On that which is not', *Synthese* 41: 155–94.
- Rosanna Keefe (2000), *Theories of Vagueness*, Cambridge University Press, Cambridge.
- Graham Priest (2003), 'A site for sorites' in Jc Beall, ed., *Liars and Heaps: New Essays on Paradox* 9–23, Oxford University Press, Oxford.
- Diana Raffman (1996), 'Vagueness and context-sensitivity', *Philosophical Studies* 81: 175–92.
- Mark Sainsbury (1990), 'Concepts without boundaries' in Rosanna Keefe and Peter Smith, ed., *Vagueness: A Reader*, MIT, Cambridge, MA, 1997. This was a lecture at King's College, London.
- Stewart Shapiro (2006), *Vagueness in Context*, Oxford University Press, Oxford.
- Roy Sorensen (2000), *Vagueness and Contradiction*, Clarendon, Oxford.
- Peter Unger (1979), 'There are no ordinary things', *Synthese* 4: 117–54.
- Achille Varzi (1999), *An Essay in Universal Semantics*, vol. 1 of *Topoi Library*, Kluwer Academic Publishers, Boston, 1999.
- Brian Weatherson (2005), 'True, truer, and truest', *Philosophical Studies* 123: 47–70.
- Timothy Williamson (1994), *Vagueness*, Routledge.
- Crispin Wright (1975), 'On the coherence of vague predicates', *Synthese* 30: 325–65.



Queries in Chapter 10

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