

On Being in a Quandary

Relativism Vagueness Logical Revisionism

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This paper addresses three problems: the problem of formulating a coherent relativism, the Sorites paradox and a seldom noticed difficulty in the best intuitionistic case for the revision of classical logic. A response to the latter is proposed which, generalised, contributes towards the solution of the other two. The key to this response is a generalised conception of indeterminacy as a specific kind of intellectual bafflement—Quandary. Intuitionistic revisions of classical logic are merited wherever a subject matter is conceived both as liable to generate Quandary and as subject to a broad form of evidential constraint. So motivated, the distinctions enshrined in intuitionistic logic provide both for a satisfying resolution of the Sorites paradox and a coherent outlet for relativistic views about, e.g., matters of taste and morals. An important corollary of the discussion is that an epistemic conception of vagueness can be prised apart from the strong metaphysical realism with which its principal supporters have associated it, and acknowledged to harbour an independent insight.

In this paper, I shall propose a unified treatment of three *prima facie* unrelated problems. Two are very well known. One is the challenge of providing an account of vagueness which avoids the Sorites paradox. This has been discussed almost to tedium, but with the achievement, it is fair to say, of increasing variety rather than convergence in the proffered solutions.¹ Another is the problem of formulating a coherent relativism (in the sense germane to matters of taste, value, etc.) This is also well-known. However it has had rather less intense recent attention; part of my project in what follows (section 1) will be to recommend a view about what the real difficulty is. But the third problem—an awkward-looking wrinkle in the standard kind of case for revision of classical logic first propounded by the Intuitionists and generalised in the work of Michael Dummett—has, I think, not been widely perceived at all, either by revisionists² or their conservative opponents.³

¹ I am afraid that the direction of the present treatment will be to add to the variety. My hope is that it will draw additional credibility from its association with resources to treat the other problems.

² Henceforward, I restrict 'revisionism' and its cognates to the specific form of logical revisionism canvassed by the Intuitionists and their 'anti-realist' descendants.

³ An insightful exception to this general myopia is Salerno 2000.

The link connecting the problems, according to the diagnosis here entertained, runs via the notion of *indeterminacy*. Specifically: I will propose and commend a—broadly epistemic—conception of what (at least in a very wide class of cases) indeterminacy *is* which not merely explains how vagueness does *not* ground the truth of the major premisses in Sorites paradoxes but also assists with the question what form an interesting relativism (whether global, or restricted to a local subject matter) may best assume, and helps to bring out what the basic intuitionistic—‘anti-realist’—misgiving about classical logic really is. Though differing in at least one—very significant—respect from the conception of indeterminacy defended in the writings of Timothy Williamson, Roy Sorensen and other supporters of the so-called Epistemic Conception of vagueness,⁴ I doubt if it would have occurred to me to explore the ensuing proposal without their precedent. Indeed, a second important sub-project of the discussion to follow is indirectly to make a case that the Epistemicists have hold of an insight which may be detached from the extreme and, for many, bizarre-seeming metaphysical realism which—with their own encouragement—is usually regarded as of the essence of their view.

Our work will be in eight sections. Sections 1–3 will lay out the problems in the order indicated in the sub-title; sections 4–6 will then take them in the reverse order and develop the advertised uniform treatment. Section 7 will comment on the relation of the proposal to the Epistemic Conception of vagueness. Section 8 is a concluding summary.

1. Relativism

1.1 Let me begin with a reminder of the crude but intuitive distinction from which the relativistic impulse springs. Any of the following claims would be likely to find both supporters and dissenters:

That snails are delicious
That cockroaches are disgusting
That marital infidelity is alright provided nobody gets hurt
That a Pacific sunset trumps any Impressionist canvas

and perhaps

That Philosophy is pointless if it is not widely intelligible

⁴ See Sorensen 1988, pp. 199–253; Williamson 1992 and 1994. The Epistemic view receives earlier sympathetic treatment in Cargile 1969 and 1979, §36 and Campbell 1974 and is briefly endorsed in Horwich 1998 at p. 81. For further references, see Williamson 1994 p. 300, note 1.

That the belief that there is life elsewhere in the universe is justified
That death is nothing to fear.

Disputes about such claims may or may not involve quite strongly held convictions and attitudes. Sometimes they may be tractable disputes: there may be some other matter about which one of the disputing parties is mistaken or ignorant, where such a mistake or ignorance can perhaps be easily remedied, with the result of a change of heart about the original claim; or there may be a type of experience of which one of the disputing parties is innocent, and such that the effect of initiation into that experience is, once again, a change of view. But there seems no reason why that should have to be the way of it. Such a dispute might persist even though there seemed to be nothing else relevant to it about which either party was ignorant or mistaken, nor any range of relevant experience which either was missing. The details of how that might happen—how the dispute might be *intransigent*—vary with the examples. But in a wide class of cases, it would likely be a matter of one disputant placing a value on something with which the other could not be brought to sympathise; or with her being prone to an emotional or other affect which the other did not share; or with basic differences of propensity to belief, perhaps associated with the kinds of personal probability thresholds which show up in such phenomena as variations in agents' degrees of risk aversion.

Intuitively, claims of the above kinds—potentially giving rise to what we may call *disputes of inclination*—contrast with claims like these:

That the snails eaten in France are not found in Scotland
That cockroaches feed only on decomposing organic matter
That extra-marital affairs sometimes support a marriage
That sunset tonight will be at 7.31 pm
That there are fewer professional analytical philosophers than there were
That there are living organisms elsewhere in the solar system
That infant mortality was significantly higher in Victorian times than in Roman.

Any of these might in easily imaginable circumstances come into dispute, and in some cases at least we can imagine such disputes too being hard to resolve. Relevant data might be hard to come by in some cases, and there are also material vaguenesses involved in most of the examples, on which a difference of opinion might turn. Then there is the

possibility of prejudice, ignorance, mistake, delusion, and so on, which in certain circumstances—perhaps far-fetched—it might be difficult to correct. However what doesn't seem readily foreseeable is that we might reach a point when we would feel the disputants should just 'agree to differ', as it were, without imputation of fault on either side. Opinions about such matters are not to be exculpated, to use a currently modish term, by factors of personal inclination, but have to answer to—it is almost irresistible to say—*the facts*.

This crude but intuitive distinction—disputes of inclination versus disputes of fact—immediately gives rise to a problem. Both types of dispute are focused on straightforward-seeming, indicative contents. But all such contents are naturally treated as truth-evaluable, and truth, one naturally thinks, is a matter of fit with the facts. So the very form of disputes of inclination seems tailor-made to encourage the idea that they are disputes of fact after all: disputes in which, *ceteris paribus*, someone is out of touch with how matters really stand. The problem is therefore: how to characterize disputes of inclination in such a way as to conserve the species, to disclose some point to the lay-philosophical intuition that there are such things at all, genuinely contrasting with—what one's characterization had better correlatively explain—disputes about the facts.

1.2 So far as I can see, there are exactly four broadly distinguishable types of possible response:

(i) *Rampant Realism* denies that the illustrated distinction has anything to do with non-factuality. For rampant realism, the surface form of disputes of inclination has precisely the significance just adumbrated: such disputes *do* centre on truth-evaluable contents, and truth *is* indeed a matter of fit with the facts. So, even in a radically intransigent dispute of inclination, there will, *ceteris paribus*, be a fact of the matter which one of the parties will be getting wrong. It may be that we have not the slightest idea how a particular such dispute might in principle be settled, and that if charged to explain it, we would hesitate to assign any role to ignorance, or prejudice, or mistake, or vagueness. These facts, however, so far from encouraging relativism, are best attributed to the imperfection of our grasp of the type of subject matter which the dispute really concerns.

I mean this option to be parallel in important respects to the Epistemic Conception of vagueness. The Epistemicist⁵ holds that vague

⁵ I shall capitalise—'Epistemicist', 'Epistemicism', etc.—whenever referring to views which, like those of Sorensen and Williamson, combine a conception of vagueness as, broadly, a matter

expressions like ‘red’, ‘bald’ and ‘thin’ actually denote properties of perfectly definite extension. But we do not (or, in some versions, cannot) know which properties these are—our concepts of them, fixed by our manifest understanding of the relevant expressions, fail fully to disclose their nature. There is thus a quite straightforward sense in which when I say that something is, for instance, red, I (necessarily) imperfectly understand what I have said.⁶ Clearly there is space for a similar view about the subject matter of a dispute of inclination. It can happen that we express a concept by ‘delicious’ which presents a property whose nature it fails (fully) to disclose. This property may or may not apply to culinary snails. There is no way of knowing who is right in the dispute, but somebody will be. At any rate, the issue is no less factual than that of whether culinary snails are indigenous to Scotland.

of ignorance with the retention of classical logic and its associated Bivalent metaphysics.

⁶ Experience shows that Epistemicists incline to protest at this. Suppose ‘tall’, say, as a predicate of human beings, applies to an individual just if they are precisely 5’ 11” tall or more—that 5’ 11” tall or more is the property actually denoted by the vague, ‘tall’, so used. Then why, in saying that an individual is tall, should I be regarded as understanding what I have said to any lesser an extent than when, in circumstances where I do not know the identity of the culprit, I say that whoever broke the clock had better own up? Why should ignorance of what, in fact, I am talking about be described as an imperfection of *understanding*?

Although it is not my purpose here to develop criticisms of the Epistemic Conception, I’ll take a moment to try to justify the charge. The foregoing protest assumes that the epistemicist is entitled to regard us as knowing what *type* of sharply bounded property an understood vague expression denotes, and as ignorant only of *which* property of that type its use ascribes. I know of no justification for that assumption. What type of sharply bounded property does ‘red’ denote? Something physical? Or a manifest but sharply bounded segment of the ‘colour wheel’? Or something else again? On what basis might one decide? And if the understanding of some common-or-garden vague expressions gives rise to no favoured intuitive *type* of candidate for their putative definitely bounded denotations, why should we favour the obvious candidates in cases—like ‘tall’—where there are such?

Intuitively, to understand a simple, subject-predicate sentence, say, is to know what object is being talked about and what property is being ascribed to it. To be sure, the purport of that slogan should not be taken to require that one invariably has an *identifying* knowledge of the former: I can fully understand an utterance of ‘Smith’s murderer is insane’ without knowing who the murderer is. But it is different with predication. Here what is demanded of one who understands is, at least in the overwhelming majority of cases, that they know—in a sense parallel to the possession of *identifying knowledge of the referent of a singular term*—what property the use of a particular predicate ascribes. Since the overwhelming majority of natural language predicates are vague, that is what the Epistemicist denies us. It would be no good for her to reply: ‘But you *do* know what property “red” denotes—it is the property of being red!’ On the Epistemic account, I know neither which property that is, nor what type of property it is, nor even—in contrast to, say, my understanding of ‘... has Alex’s favourite property’ where while ignorant in both those ways, I at least know what a property has to do in order to fit the bill—what would make it true that a particular property was indeed ascribed by the normal predicative use of ‘red’. It is the last point that justifies the remark in the text; if you were comparably ignorant in all three respects about the content of a definite description—thus ignorant, in particular, of what condition its bearer, if any, would have to meet—it would be absolutely proper to describe you as failing fully to understand it.

I do not propose to discuss the rampant realist proposal in any detail here. No doubt a fuller discussion of it would recapitulate many of the moves and counter-moves made in the recent debates about the Epistemic Conception of vagueness. Still, there are some interesting, foreseeably additional issues. Here are three:

First, is there any principled ground whereby a theorist might propose an Epistemicist treatment of vagueness but refuse to go rampant realist over what we are loosely characterizing as matters of inclination?

Second, can a rampant realist treatment of matters of inclination match the conservatism of the Epistemic Conception of vagueness? The Epistemicist does not, properly understood, *deny* there is any such thing as vagueness; rather, she attempts a distinctive account, in epistemic terms, of what vagueness consists in. A similar account would be desirable, if the approach is to be extended to matters of inclination, of what it is that really distinguishes them from those matters which the opposing, mistaken view takes to be the only genuinely factual ones. A satisfying account must somehow *save* the crude and intuitive distinction, rather than merely obliterate it.

Third, the question arises whether rampant realism can be reconciled with the good-standing of our ordinary practice of the discourses in question. If irremediable ignorance—for instance, a gulf between our concept of the property denoted by ‘delicious’ and the nature of that property—is at work in disputes of inclination, one might wonder with what right we take it that there is no serious doubt in cases where there is *consensus* that the property applies. Of course, the same issue arises for Epistemicist treatments of vagueness: if we do not know enough about the sharply bounded property we denote by ‘red’ to be sure where its boundaries lie, what reason have we to think we have not *already* crossed those boundaries in cases where we are agreed that something is red? However the problem may be a little more awkward for an epistemic treatment of matters of inclination. For the Epistemicist can presumably rejoin that however the reference of ‘red’ is fixed, a good account will constrain the word to refer to a property which does at least apply to the paradigms, on which we concur. The possible awkwardness for the extended, rampant realist view is that there are not, in the same way, *paradigms* for many of the examples of matters of inclination. That is: there are shades of colour that must be classified as red on pain of perceptual or conceptual incompetence, but there are no tastes that *must* similarly be classified as delicious. If matters of inclination—for instance, of gastronomic taste—even where not contested in fact, are as a class *essentially contestable*, at least in principle,

without incompetence, then in contrast with the situation of ‘red’ and vague expressions generally, there would seem to be no clear candidates for the *partial* extensions that a competitive account of the reference of the distinctive vocabulary — ‘delicious’, ‘over-salted’ etc. — might plausibly be required to conserve.

(ii) The second possible response to the problem of characterizing disputes of inclination is that of *Indexical Relativism*. On this view, truth conditional contents are indeed involved in ‘disputes’ of inclination, but actually there are no *real disputes* involved. Rather, the seemingly conflicting views involve implicit reference to differing standards of assessment, or other contextual parameters, in a way that allows both disputants to be speaking the literal truth. Snails are delicious *for you* — for someone with your gastronomic susceptibilities and propensities — but they are not delicious for me — for one whose culinary taste is as mine is. Hurt-free infidelities can be acceptable to you — perhaps, to anyone inclined to judge the moral worth of an action by its pleasurable or painful effects alone — but they are not acceptable to me — to one inclined to value openness and integrity in close personal relationships for its own sake, irrespective of any independently beneficial or harmful consequences.

This, very familiar, kind of relativistic move is still supported in recent philosophy — for instance by Gilbert Harman on morals.⁷ Its obvious drawback is that it seems destined to misrepresent the manner in which, at least as ordinarily understood, the contents in question embed under operations like the conditional and negation. If it were right, there would be an analogy between disputes of inclination and the ‘dispute’ between one who says ‘I am tired’ and her companion who replies, ‘Well, I am not’ (when what is at issue is one more museum visit). There are the materials here, perhaps, for a (further) disagreement but no disagreement has yet been expressed. But ordinary understanding already hears a disagreement between one who asserts that hurt-free infidelity is acceptable and one who asserts that it is not. And it finds a distinction between the denial that hurt-free infidelity is acceptable and the denial that it is generally acceptable by the standards employed by someone who has just asserted that it is acceptable. Yet for the indexical relativist, the latter should be the proper form of explicit denial of the former. In the same way, the ordinary understanding finds a distinction between the usual understanding of the conditional, that

⁷ Harman has been, of course, a long-standing champion of the idea. The most recent extended defence of his views is in Harman and Thomson 1996, Part One. For many-handed discussion, see Harman, Thomson and others 1998.

if hurt-free infidelity is acceptable, so are hurt-free broken promises, and the same sentence taken on the understanding that both antecedent and consequent are to be assessed relative to some one particular framework of standards (that of an actual assertor of the sentence, a framework which might or might not treat infidelity and promise-breaking in different ways).

Of course there is room for skirmishing here, some of it no doubt quite intricate. But it is not clear that we should expect that indexical relativism can save enough of the standard practice of discourses within which disputes of inclination may arise to avoid the charge that it has simply missed their subject matter.

(iii) The third possible response to the problem of characterizing disputes of inclination is that of *Expressivism*: the denial that the discourses in question genuinely deal in truth-conditional contents at all. Of course, on this view there are, again, no real *disputes* of inclination at all—merely differences of attitude, feeling and reaction. There has been a significant amount of recent discussion of this kind of approach, stimulated by the sophisticated versions of it proposed by writers such as Simon Blackburn and Alan Gibbard.⁸ But it confronts a very general dilemma. What is to be the expressivist account of the propositional—seemingly truth-conditional—surface of the relevant discourses? The clean response is to argue that it is misleading—that what is conveyed by discourse about the delicious, the morally acceptable, or whatever this kind of view is being proposed about, can and may be better expressed by a regimented discourse in which the impression that truth-conditional contents are being considered, and denied, or hypothesised, or believed, etc. is analysed away. However it seems fair to say that no-one knows how to accomplish this relatively technical project, with grave difficulties in particular attending any attempt to reconstruct the normal apparatus of moral argument in such a way as to dispel all appearance that it moves among truth-evaluable moral contents.⁹ The alternative is to allow that the propositional surface of moral discourse, to stay with that case, can actually comfortably consist with there being no genuinely truth-conditional contents at issue, no genuine moral beliefs, no genuine moral arguments construed as movements from possible beliefs to possible beliefs, and so on. But now

⁸ Blackburn 1984, chapter 6: 'Evaluations, Projections and Quasi-realism', still remains the best introduction to his view, but the most recent official incarnation is Blackburn 1998; Alan Gibbard's ideas are developed systematically in his magisterial work (Gibbard 1990).

⁹ For exposition and development of some of the basic difficulties, see Hale (1986, 1992 and forthcoming).

the danger is that the position merely becomes a terminological variant for the fourth response, about to be described, with terms like 'true' and 'belief' subjected to a (pointless) high redefinition by expressivism, but with no substantial difference otherwise.

(iv) Of the options so far reviewed, the first allows that a dispute of inclination is a real dispute, but at the cost of conceding that one of the disputants will be undetectably wrong about a subject matter of which both have an essentially imperfect conception, while the other two options deny, in their respective ways, that there is any genuine dispute at all. The remaining option—I'll call it *True Relativism*—must, it would seem, be the attempt to maintain that, while such disputes may indeed concern a common truth-evaluable claim, and thus may be genuine—may involve incompatible views about it—there need be nothing about which either disputant is mistaken, nor any imperfection in their grasp of what it is that is in dispute. Opinions held in disputes of inclination may, in particular cases, be flawed in various ways. But in the best case, the true relativist thought will be, such a dispute may oppose two opinions with which there is no fault to be found, even in principle, save by invocation of the idea that there is an ulterior, undecidable fact of the matter about which someone is mistaken. That hypothesis, distinctive of the first option, is exactly what true relativism rejects: for true relativism, genuinely conflicting opinions about a truth-evaluable claim may each be unimprovable and may involve no misrepresentation of any further fact.

1.3 In the light of the shortcomings, briefly noted, of the three available alternatives—and because it has, I think, some claim to be closest to the commonsense view of the status of disputes of inclination—it is of central importance to determine whether the materials can be made out for a stable and coherent true relativism. In *Truth and Objectivity* (Wright 1992) I proposed—without, I think, ever using the word 'relativism'—a framework one intended effect of which was to be just that. The key was the contrast between areas of discourse which, as it is there expressed, would be merely *minimally truth-apt*, and areas of discourse where, in addition, differences of opinion would be subject to the constraint of *cognitive command*.

The idea that there are merely minimally truth-apt discourses comprises two contentions, about truth and aptitude for truth respectively. The relevant—minimalist—view about truth, in briefest summary, is that all it takes in order for a predicate to qualify as a truth predicate is its satisfaction of each of a basic set of platitudes about truth: for instance, that to assert is to present as true, that statements which are

apt for truth have negations which are likewise, that truth is one thing, justification another, and so on.¹⁰ The view about truth aptitude, likewise in briefest summary, itself comprises two contentions:

that any discourse dealing in assertoric contents will permit the definition upon its sentences of a predicate which qualifies as a truth predicate in the light of the minimalist proposal about truth;

and

that a discourse should be reckoned to deal with suitable such contents just in case its ingredient sentences are subject to certain minimal constraints of *syntax*—embeddability within negation, the conditional, contexts of propositional attitude, etc.—and *discipline*: their use must be governed by commonly-acknowledged standards of warrant.

A properly detailed working out of these ideas¹¹ would foreseeably have the effect that almost all the areas of discourse which someone intuitively sympathetic to the ‘crude but intuitive’ distinction might want to view as hostage to potential disputes of inclination will turn out to deal in contents which, when the disciplinary standards proper to the discourse are satisfied, a supporter is going to be entitled to claim to be true. That however—the proposal is—ought to be consistent with the discourse in question failing to meet certain further conditions neces-

¹⁰ A fuller list might include:

the transparency of truth—that to assert is to present as true and, more generally, that any attitude to a proposition is an attitude to its truth—that to believe, doubt or fear, for example, that *P* is to believe, doubt or fear that *P* is true. (*Transparency*)

the opacity of truth—incorporating a variety of weaker and stronger principles: that a thinker may be so situated that a particular truth is beyond her ken, that some truths may never be known, that some truths may be unknowable in principle, etc. (*Opacity*)

the conservation of truth-aptitude under embedding: aptitude for truth is preserved under a variety of operations—in particular, truth-apt propositions have negations, conjunctions, disjunctions, etc. which are likewise truth-apt. (*Embedding*)

the Correspondence Platitude—for a proposition to be true is for it to correspond to reality, accurately reflect how matters stand, ‘tell it like it is’, etc. (*Correspondence*)

the contrast of truth with justification—a proposition may be true without being justified, and vice-versa. (*Contrast*)

the timelessness of truth—if a proposition is ever true, then it always is, so that whatever may, at any particular time, be truly asserted may—perhaps by appropriate transformations of mood, or tense—be truly asserted at any time. (*Timelessness*)

that truth is absolute—there is, strictly, no such thing as a proposition’s being more or less true; propositions are completely true if true at all. (*Absoluteness*)

The list might be enlarged, and some of these principles may anyway seem controversial. Moreover it can be argued that the Equivalence Schema underlies not merely the first of the platitudes listed—Transparency—but the Correspondence and Contrast Platitudes as well. For elaboration of this claim, see Wright 1992 pp. 24–7. For further discussion of the minimalist conception, and adjacent issues, see Wright 1998 and forthcoming.

¹¹ A partial development of them is offered in Wright 1992 chapters 1–2.

sary to justify the idea that, in the case of such a dispute, there will be a further fact in virtue of which one of the disputants is in error.

What kind of condition? The leading idea of someone—the *factualist*—who believes that a given discourse deals in matters of fact—unless she thinks that its truths lie beyond our ken—is that soberly and responsibly to practise that discourse is to enter into a kind of *representational* mode of cognitive function, comparable in relevant respects to taking a photograph or making a wax impression of a key. The factualist conceives that certain matters stand thus and so independently of us and our practice—matters comparable to the photographed scene and the contours of the key. We then engage in the appropriate investigative activity—putting ourselves at the mercy of the standards of belief-formation and appraisal appropriate to the discourse in question (compare taking the photograph or impressing the key on the wax)—and the result is to leave an imprint on our minds which, in the best case, appropriately matches the independently standing fact.

This kind of thinking, while doubtless pretty vague and metaphorical, does have certain quite definite obligations. If we take photographs of one and the same scene which somehow turn out to represent it in incompatible ways, there has to have been some kind of shortcoming in the function of one (or both) of the cameras, or in the way it was used. If the wax impressions we take of a single key turn out to be of such a shape that no one key can fit them both, then again there has to have been some fault in the way one of us went about it, or in the materials used. The tariff for taking the idea of representation in the serious way the factualist wants to is that when subjects' 'representations' prove to conflict, then there has to have been something amiss with the way they were arrived at or with their vehicle—the wax, the camera, or the thinker.

That's the key thought behind the idea of cognitive command. The final formulation offered in *Truth and Objectivity* was that a discourse exerts cognitive command just in case it meets this condition:

It is a priori that differences of opinion formulated within (that) discourse, unless excusable as a result of vagueness in a disputed statement, or in the standards of acceptability, or variation in personal evidence thresholds, so to speak, will involve something which may properly be regarded as a cognitive shortcoming (Wright 1992, p.144).

To stress: the constraint is motivated, in the fashion just sketched, by the thought that it, or something like it, is a commitment of anyone who thinks that the responsible formation of opinions expressible

within the discourse is an exercise in the *representation* of self-standing facts. Conversely: any suggestion that conflicts in such opinions can be *cognitively blameless*, yet no vagueness be involved of any of the three kinds provided for in the formulation, is a suggestion that the factualist—seriously representational—view of the discourse in question is in error. Broadly, then, the implicit suggestion of *Truth and Objectivity* was that true relativism about a particular discourse may be formulated as the view that, while qualifying as minimally truth-apt, it fails to exhibit cognitive command.

1.4 However there is an awkwardness to be confronted by any proposal of this general kind. The key to true relativism, as we have it so far, is somehow to make out that a discourse deals in contents which are simultaneously truth-apt yet such that, when they fall into dispute, there need in principle be nothing wrong with—nothing to choose between—the disputed opinions. But in granting that the contents in question are minimally truth-apt, the relativist allows, presumably, that they are subject to ordinary propositional-logical reasoning. So, where *P* is any matter of inclination which comes into dispute between a thinker A, who accepts it, and a thinker B, who does not, what is wrong with the following *Simple Deduction*

1	(1) A accepts <i>P</i>	—	Assumption
2	(2) B accepts Not- <i>P</i>	—	Assumption
3	(3) A's and B's disagreement involves no cognitive shortcoming	—	Assumption
4	(4) <i>P</i>	—	Assumption
2,4	(5) B is guilty of a mistake, hence of cognitive shortcoming	—	2, 4
2, 3	(6) Not- <i>P</i>	—	4, 5, 3 RAA
1, 2, 3	(7) A is guilty of a mistake, hence of cognitive shortcoming	—	4
1,2,	(8) Not -[3]	—	3, 3, 7 RAA

The Simple Deduction seems to show that whenever there is a difference of opinion on *any*—even a merely minimally—truth-apt claim, there *is*—quite trivially—a cognitive shortcoming, something to choose between the views. And since this has been proved a priori, cognitive command holds for all truth-apt discourses. So the alleged gap between minimal truth-aptitude and cognitive command, fundamental to the programme of *Truth and Objectivity*, disappears.

Obviously there has to be *something* off-colour about this argument. So much is immediately clear from the reflection that the disagreement it concerns could have been about some borderline case of a *vague* predicate: nothing that happens in the Simple Deduction is sensitive to the attempt made in the formulation of cognitive command to exempt disagreements which are owing to vagueness (one way or another). Yet the Deduction would have it that even these too must involve cognitive shortcoming. And the notion of shortcoming involved is merely that of bare *error*—mismatch between belief and truth-value. So if the argument shows anything, it would appear to show a priori that any difference of opinion about a borderline case of a vague predicate will also involve a mismatch between belief (or unbelief) and actual truth-value. It would therefore seem that there has to *be* a truth-value in all such cases, even if we have not the slightest idea how it might be determined. We appear to have been saddled with the Epistemic Conception! I believe that means, with all due deference to the proponents of that view, that the Simple Deduction proves too much.¹²

So where does it go wrong? It may be felt that the trouble lies with an overly limited conception of 'cognitive shortcoming'. The considerations used to motivate the cognitive command constraint—the comparison with the idea of representation at work in the examples of the photograph or the wax-impression—license something richer: a notion of cognitive shortcoming that corresponds to failure or limitation of process, mechanism or materials, and not merely a mismatch between the product and its object. The two cameras that produce divergent—conflicting—representations of the same scene must, one or both, have functioned less than perfectly, not merely in the sense that

¹² It may be rejoined (and was, by Mark Sainsbury, in correspondence) that we could accept the Simple Deduction without commitment to the stark bivalence espoused by the Epistemic Conception if we are prepared to allow that *A*'s and *B*'s respective opinions may indeed both reflect cognitive shortcoming where *P*'s truth-status is borderline—on the ground that, in such circumstances, both ought to be *agnostic* about *P*. The point is fair, as far as it goes, against the gist of the preceding paragraph in the text. However I believe—and this will be a central plank of the discussion to follow—that it is a profound mistake to regard positive or negative verdicts about borderline cases as *eo ipso* defective. If that were right, a borderline case of *P* should simply rank as a special kind of case in which—because things are *other than P says*—its negation ought to hold. In any case the Simple Deduction will run no less effectively if what *B* accepts is not 'Not-*P*' when understood narrowly, as holding only in *some* types of case where *P* fails to hold, but rather as holding in *all* kinds of case where things are not as described by *P*—*all* kinds of ways in which *P* can fail of truth, including being borderline (if, *contra* my remark above, that is how being borderline is conceived.) So even if Bivalence is rejected, the Simple Deduction still seems to commit us to the more general principle Dummett once called *Determinacy*: that *P* always has a determinate *truth-status*—of which Truth and Falsity may be only two among more than two possibilities—and that at least one of any pair of conflicting opinions about *P* must involve a mistake about this status, whatever it is. That is still absolutely in keeping with the realist spirit of the Epistemic Conception, to which it still appears—at least in spirit—the Simple Deduction commits us if unchallenged.

one (or both) gives out an inaccurate snapshot but in the sense that there must be some independent defect, or limitation, in the process whereby the snapshot was produced. So too, it may be suggested, with cognitive command: the motivated requirement is that differences of opinion in regions of genuinely representational discourse should involve imperfections of *pedigree*: shortcomings in the manner in which one or more of the opinions involved were arrived at, of a kind that might be appreciated as such independently of any imperfection in the result. Once shortcoming in that richer sense is required, it can no longer be sufficient for its occurrence merely that a pair of parties disagree—it needs to be ensured in addition that their disagreement betrays something amiss in the way their respective views were arrived at, some independently appreciable failure in the representational mechanisms. That, it may be felt, is what the cognitive command constraint should be understood as really driving at.

Such an emended understanding of cognitive shortcoming is indeed in keeping with the general motivation of the constraint. But it does not get to the root of our present difficulties. For one thing, the Simple Deduction would still run if we dropped all reference to cognitive shortcoming—thereby finessing the issue of how that notion should be understood—and replaced line 3 with:

(3^{*}) *A's and B's disagreement involves no mistake.*

The resulting reasoning shows—if anything—that any pair of conflicting claims involve a mistake. If it is sound, there just isn't any fourth, i.e., true-relativistic response to the original problem. To suppose that *P* is merely minimally truth-apt in the sense of allowing of hypothesis, significant negation, and embedding within propositional attitudes is already, apparently, a commitment to rampant realism. Surely that cannot be right. But the modified Deduction, with (3^{*}) replacing (3), shows that refining the idea of cognitive shortcoming in the manner just indicated has nothing to contribute to the task of explaining why not.

Perhaps more important, however, is the fact that we can run an argument to much the same effect as the (unamended) Simple Deduction even when 'cognitive shortcoming' is explicitly understood in the more demanding sense latterly proposed.¹³ One reason why rampant realism is unattractive is because by insisting on a fact of the matter to determine the rights and wrongs of any dispute of inclination, no matter how intransigent, it is forced to introduce the idea of a truth-

¹³ This point was first made in Shapiro and Taschek 1996.

making state of affairs of which we have a necessarily imperfect concept,¹⁴ and whose obtaining, or not, thus necessarily transcends our powers of competent assessment. This is unattractive in direct proportion to the attraction of the idea that, in discourses of the relevant kind, we are dealing with matters which essentially *cannot* outrun our appreciation: that there is no way in which something can be delicious, or disgusting, or funny, or obscene, etc., without being appreciable as such by an appropriately situated human subject because these matters are, in some very general way, constitutively dependent upon *us*. What we—most of us—find it natural to think is that disputes of inclination typically arise in cases where *were* there a ‘fact of the matter’, it would have to be possible—because of this constitutive dependence—for the protagonists to know of it. Indeed, the ordinary idea that such disputes need concern no fact of the matter is just a *modus tollens* on that conditional: were there a fact of the matter, the disputants should be able to achieve consensus about it; but it seems manifest in the character of their disagreement that they cannot; so there isn’t any fact of the matter. So for all—or at least for a wide class of cases—of claims, *P*, apt to figure in a dispute of inclination, it will seem acceptable—and the recoil from rampant realism will provide additional pressure—to hold to the following principle of *evidential constraint* (EC):

$P \rightarrow$ it is feasible to know that P ¹⁵

and to hold, moreover, that the acceptability of this principle is a priori, dictated by our concept of the subject matter involved.^{16, 17}

¹⁴ See footnote 6 above.

¹⁵ One substitution instance, of course, is:

Not- $P \rightarrow$ it is feasible to know that not- P .

¹⁶ To forestall confusion, let me quickly address the quite natural thought that, where EC applies, cognitive command should be assured—since any difference of opinion will concern a knowable matter—and hence that any reason to doubt cognitive command for a given discourse should raise a doubt about EC too. This, if correct, would certainly augur badly for any attempt to locate disputes of inclination within discourses where cognitive command failed but EC held! But it is not correct. What the holding of EC for a discourse ensures is, just as stated, that each of the conditionals

$P \rightarrow$ it is feasible to know that P

Not- $P \rightarrow$ it is feasible to know that not- P ,

is good for each proposition P expressible in that discourse. That would ensure that any difference of opinion about P would concern a knowable matter, and hence involve cognitive shortcoming, only if in any such dispute it would have to be determinate that one of P or not- P would hold. But of course it is of the essence of (true) relativism to reject precisely that—and to do so for reasons unconnected with any vagueness in the proposition that P .

¹⁷ The modality involved in *feasible knowledge* is to be understood, of course, as constrained by

Consider, then, the following *EC-Deduction*:

1	(1)	<i>A</i> believes <i>P</i> , <i>B</i> believes not- <i>P</i> , and neither has any cognitive shortcoming.	—	Assumption
2	(2)	<i>P</i>	—	Assumption
2	(3)	It is feasible to know that <i>P</i>	—	2, EC
1,2	(4)	<i>B</i> believes the negation of something feasibly knowable.	—	1,3
1,2	(5)	<i>B</i> has a cognitive shortcoming	—	4
1	(6)	Not- <i>P</i>	—	2,1,5 RAA
1	(7)	It is feasible to know that not- <i>P</i>	—	6,EC
1	(8)	<i>A</i> believes the negation of something feasibly knowable.	—	1,7
1	(9)	<i>A</i> has a cognitive shortcoming	—	8
	(10)	Not-[1]	—	1,1,9 RAA

This time ‘cognitive shortcoming’, it is perhaps superfluous to remark, must involve less than ideal procedure, and not just error in the end product, since it involves mistakes about feasibly knowable matters.

So: it seems that 1 and EC are inconsistent, i.e. evidential constraint is incompatible with the possibility of cognitively blameless disagreement. If the EC-Deduction is sound, then it seems that wherever EC is a priori, cognitive command is met. And it is plausible that EC *will* be a priori at least for large classes of the types of claim—*par excellence* simple predications of concepts like *delicious*—where relativism is intuitively at its most attractive, and where a gap between minimal truth-aptitude and cognitive command is accordingly called for if we are to sustain the *Truth and Objectivity* proposal about how relativism should best be understood.¹⁸

the distribution of truth values in the actual world. The proposition that, as I write this, I am in Australia is one which it is merely (logically or conceptually) possible to know—the possible world in question is one in which the proposition in question is true, and someone is appropriately placed to recognise its being so. By contrast, the range of what is feasible for us to know goes no further than what is actually the case: we are talking about those propositions whose actual truth could be recognised by the implementation of some humanly feasible process. (Of course there are further parameters: recognisable when? where?, under what if any sort of idealisation of our actual powers?, etc. But these are not relevant to present concerns.)

¹⁸ To stress: it is not merely *Truth and Objectivity*’s implicit proposal about *relativism* that is put in jeopardy by the EC-Deduction. According to the project of that book, cognitive command is a

1.5 What other objection might be made to either Deduction? Notice that there is no assumption of Bivalence in either argument; both can be run in an intuitionistic logic. But one might wonder about the role of *reductio* in the two proofs. For instance, at line 6 in the Simple Deduction, the assumption of P having run into trouble, RAA allows us to infer that its negation holds. Yet surely, in any context where we are trying seriously to make sense of the idea that there may be ‘no fact of the matter’, we must look askance at any rule of inference which lets us advance to the negation of a proposition just on the ground that its assumption has run into trouble. More specifically: in any circumstances where it is a possibility that a proposition’s failing to hold may be a reflection merely of there being no ‘fact of the matter’, its so failing has surely to be distinguished from its negation’s holding.

Natural though the thought is, it is not clear that there is much mileage in it. Let’s make it a bit more specific.¹⁹ The idea is best treated, we may take it, as involving restriction of the right-to-left direction of the *Negation Equivalence*,

$$T\neg P \leftrightarrow \neg TP,$$

expressing the commutativity of the operators, ‘it is true that’ and ‘it is not the case that’. In circumstances where there is no fact of the matter whether or not P , it will be the case both that $\neg TP$ and $\neg T\neg P$. The proper conclusion, on the assumptions in question, of the *reductio* at line 6 of the Simple Deduction is thus not that the negation of P holds, but merely that it is not the case that P is true. And from this, since it is consistent with there being ‘no fact of the matter’ whether or not P , we may not infer (at line 7) that A is guilty of any mistake in accepting P . Or so, anyway, the idea has to be.

Rejecting the Negation Equivalence has repercussions, of course, for the Equivalence Schema itself:

$$TP \leftrightarrow P$$

since one would have to reject the ingredient conditional:

$$P \rightarrow TP \quad ^{20}$$

significant watershed but is assured for all discourses where epistemic constraint fails and realism, in Dummett’s sense, is the appropriate view. Thus if the EC-Deduction were to succeed, cognitive command would hold universally and thus fail to mark a realism-relevant crux at all.

¹⁹ I draw here on a suggestion of Patrick Greenough.

²⁰ There will be no cause to question the converse conditional, which is needed for the derivation of the uncontroversial $T\neg P \rightarrow \neg TP$.

That flies in the face of what would seem to be an absolutely basic and constitutive property of the notion of truth, that P and TP are, as it were, *attitudinally equivalent*: that any attitude to the proposition that P —belief, hope, doubt, desire, fear, etc.—is equivalent to the same attitude to its truth. For if that's accepted, and if it is granted that any reservation about a conditional has to involve the taking of some kind of differential attitudes to its antecedent and consequent, then there simply can be no coherent reservation about $P \rightarrow TP$.

A more direct way of making essentially the same point is this. At line 6 of each Deduction, even with RAA modified as proposed, we are entitled to infer that it is not the case that P is true. By hypothesis, however, A accepts P . Therefore unless that somehow does fall short of an acceptance that P is true, A is guilty of a mistake in any case. But how could someone accept P without commitment to its truth?

Indeed, there is actually a residual difficulty with this whole tendency, independent of issues to do with the attitudinal transparency of truth. Simply conceived, the mooted response to the two Deductions is trying to make out/exploit the idea that A and B may each be neither right nor wrong because there is 'no fact of the matter', where this conceived as a *third possibility*, contrasting with either A or B being right. That idea may well demand some restriction on the form of *reductio* utilised in the two Deductions. But the problem they are bringing to light will persist even after the restriction. For the simple fact now seems to be that A is taking matters to be one way, and B is taking them to be another, when in truth they are *neither*—when, precisely, a third possibility obtains. In that case there is indeed nothing to choose between A 's and B 's respective views, but only because they are both equally *off-beam*. We achieve the parity between their views essential to any satisfactory working out of a true relativism only by placing them in *parity of disesteem*. This general point—broadly, the intuitive inadequacy of 'third possibility' approaches to the construal of indeterminacy—will recur in the sequel.

So, that is the first of the three problems which I want to work towards a unified approach to: it is the problem of stabilising the contrast between minimal truth aptitude and cognitive command or, more generally, the problem of showing how there can indeed be a coherent true relativism—a coherent response of the fourth kind to the challenge of providing a proper account of the character of disputes of inclination.

2. The Sorites

2.1 Even after all the attention meted out to it, the simplicity of the Sorites paradox can still seem quite breathtaking. Take any example of the standard sort of series. Let F be the predicate in question. Let x' be the immediate successor in the series of any of its elements, x . The first element in the series—call it ' o '—will be F and the last—' k '—will be non- F . And of course F will be vague. If it were precise, there would be a determinate cut-off point—a last F -element in the series, immediately succeeded by a first non- F one. It would be true that $\exists x(Fx \wedge \neg Fx')$. So since F is vague, that claim is false. And its being false would seem to entail that every F -element is succeeded by *another* F -element: that $\forall x(Fx \rightarrow Fx')$. But that is trivially inconsistent with the data that Fo and that not- Fk .

What is startling is that it is, seemingly, child's-play to replicate this structure with respect to almost every predicate that we understand; and that the motivation for the troublesome major premiss—

$$\forall x(Fx \rightarrow Fx')$$

—seems to flow directly just from the very datum that F is vague, that is, from the denial that it is precise. Again: if $\exists x(Fx \wedge \neg Fx')$ just *says*—falsely—that F is precise in the relevant series, then surely it's (classical) contradictory, $\forall x(Fx \rightarrow Fx')$, just says—*truly*—that F is vague. But it was given that Fo and that not- Fk . Seemingly incontrovertible premisses emerge—extremely simply, if a little long-windedly—as incompatible. Vague predicates, in their very nature, seemingly have all-inclusive extensions.

2.2. Hilary Putnam once suggested that an intuitionistic approach might assist (see Putnam 1983, pp. 271–86). How exactly? Not, anyway, by so restricting the underlying logic that the paradox cannot be derived.²¹ It is true that it takes classical logic to motivate the major premiss, $\forall x(Fx \rightarrow Fx')$, on the basis of denial of the *unpalatable existential*, $\exists x(Fx \wedge \neg Fx')$. But the paradox could as well proceed directly from that denial:

$$\neg \exists x(Fx \wedge \neg Fx')$$

in intuitionistic logic. To be sure, we cannot then reason intuitionistically from Fo to Fk . (To do so would require double-negation elimination steps.) But we can still run the Sorites reasoning backwards, from not- Fk to not- $F(o)$, using just n applications of an appropriate sub-rou-

²¹ I do not suggest that Putnam was under any illusion about this.

tine of conjunction introduction, existential introduction and RAA. So what profit in Intuitionism here?

Putnam's thought is best taken to have been that there is no option but to regard the major premisses,

$$\neg \exists x(Fx \wedge \neg Fx')$$

or

$$\forall x(Fx \rightarrow Fx'),$$

as reduced to absurdity by the paradox, and that we are therefore constrained to accept their respective negations,

$$\neg \neg \exists x(Fx \wedge \neg Fx')$$

and

$$\neg \forall x(Fx \rightarrow Fx'),$$

as demonstrated. The advantage secured by an intuitionistic framework is then that, lacking double negation elimination—and also the classical rule, $\neg \forall x(\dots) \Rightarrow \exists x \neg(\dots)$, in consequence—we are not thereby constrained to accept the *unpalatable existential*:

$$\exists x(Fx \wedge \neg Fx').$$

So we can treat the Sorites reasoning as a straightforward *reductio* of its major premiss without thereby seemingly being forced into denying the very datum of the problem, viz. that *F* is vague.

The trouble is that this suggestion, so far, deals with only half the problem. Avoiding the unpalatable existential is a good thing, no doubt. Yet equally we have to explain what is wrong with its denial. And does not recognition of the vagueness of *F* in the relevant series precisely *enforce* that denial? Does not the vagueness of *F* just *consist in* the fact that no particular claim of the form, $(Fa \wedge \neg Fa')$, is true? And is not the problem compounded by the fact that the usual style of anti-realist/intuitionist semantics will require us to regard recognition that nothing could justify such a claim as itself a conclusive reason for denying each particular instance of it for the series in question? It is true that intuitionistic resources would avoid the need to treat the Sorites reasoning as a proof of the unpalatable existential claim. But that thought goes no way to explaining how to resist its *negation*, which seems to be both an apt characteristic expression of *F*'s vagueness and mandated by intuitionist style-semantics in any case. And to stress: the negation leads straight to the paradox, whether our logic is classical or intuitionist (cf. Read and Wright 1985).

This brings out sharply what I regard as the most natural perspective on what a solution to the Sorites has to accomplish. Since the reasoning is a *reductio* of the major premiss, we have to recognise that $\neg\neg\exists x(Fx \wedge \neg Fx')$ is true. So we need to understand

- (i) how the falsity of $\neg\exists x(Fx \wedge \neg Fx')$ can be consistent with the vagueness of F ; and
- (ii) how and why it can be a principled response to refuse to let $\neg\neg\exists x(Fx \wedge \neg Fx')$ constitute a commitment to the unpalatable existential, and hence—apparently—to the precision of F .²²

3. Revisionism

3.1 It is generally though not universally assumed among interested philosophers that anti-realism in something close to Dummett's sense—the adoption of an evidentially constrained notion of truth as central in the theory of meaning—should lead to revisions in classical logic. But why? Truth plays a role in the standard semantical justification for classical logic. Persuasion that truth is essentially—or locally—evidentially constrained might thus lead to (local) dissatisfaction with classical *semantics*—and hence with the standard justification for classical logic. But why should that enjoin dissatisfaction with the logic itself? There would seem to be an assumption at work that classical logic needs its classical justification. But maybe it might be justified in some other way. Or maybe it needs no semantical justification at all.²³ Is there a revisionary argument that finesses this apparent lacuna?

Here is one such proposal—I will call it the Basic Revisionary Argument—advanced by myself (see Wright 1992, chapter 2, pp. 37–44.). Assume the discourse in question is one for which we have no guarantee of decidability: we do not know that it is feasible, for each of its statements P , to come to know P or to come to know not- P . Thus this principle holds

$$(NKD) \quad \neg K (\forall P) (FeasK(P) \vee FeasK(\neg P))$$

Then given that we also accept

²² This perspective is not mandatory, of course. In particular, it will not appeal to any dyed-in-the-wool classicists. Supervaluationist and Epistemicist approaches try, in their different ways, to allow us the unpalatable existential while mitigating its unpalatability. But those are not the approaches we follow here.

²³ I pursued these doubts about Dummett's revisionary line of thought in Wright 1993, chapter 15, pp. 433–57.

(EC) $P \rightarrow \text{FeasK}(P)$

—any truth of the discourse in question may feasibly be known—we get into difficulty if we also allow as valid

(LEM) $P \vee \neg P$

For LEM and EC sustain simple reasoning to the conclusion that any P is such that either it or its negation may feasibly be known.²⁴ If we *know* that both LEM and EC are good, this reasoning presumably allows us to know that, for each P , $(\text{FeasK}(P) \vee \text{FeasK}(\neg P))$. But that knowledge is inconsistent with NKD. Thus it cannot stably be supposed that each of EC, LEM and NKD is known. Anti-realism supposes that EC is known a priori, and NKD seems incontrovertible—(for does it not merely acknowledge that, relative to extant means of decision, not all statements are decidable?) So the anti-realist must suppose that LEM is not known—agnosticism about it is mandated so long as we know that we don't know that it is feasible to decide any significant statement. Since logic has no business containing first principles that are uncertain, classical logic is unacceptable in our present state of information.

Of course, there are *three* possible responses to the situation: to deny, with the anti-realist, that LEM is known; to deny, with the realist, that EC is known; or to accept the reasoning as a proof that NKD is after all wrong. The last might be reasonable if one had provided consistent and simultaneous motivation for LEM and EC. But it is not a reasonable reaction when the grounds—if any—offered for LEM presuppose an evidentially unconstrained notion of truth, (or at least have not been seen to be compatible with evidential constraint.)

Note that provided disjunction sustains reasoning by cases, it is LEM—the *logical law*—that is the proper target of the argument, not just the semantic principle of Bivalence. (And reasoning by cases would be sustained in the relevant case if, e.g., the semantics was standard-

²⁴ For a reason to emerge in the next footnote, we should formulate the reasoning like this:

LEM	(i)	$P \vee \neg P$	
EC	(ii)	$P \rightarrow \text{FeasK}(P)$	
	(iii)	$\text{FeasK}(P) \rightarrow (\text{FeasK}(P) \vee \text{FeasK}(\neg P))$	
EC	(iv)	$P \rightarrow (\text{FeasK}(P) \vee \text{FeasK}(\neg P))$	(ii), (iii)
EC	(v)	$\neg P \rightarrow \text{FeasK}(\neg P)$	
	(vi)	$\text{FeasK}(\neg P) \rightarrow (\text{FeasK}(P) \vee \text{FeasK}(\neg P))$	
EC	(vii)	$\neg P \rightarrow (\text{FeasK}(P) \vee \text{FeasK}(\neg P))$	(vi), (vii)
LEM, EC	(viii)	$\text{FeasK}(P) \vee \text{FeasK}(\neg P)$	(i), (iv), (vii) disjunction elimination

supervaluational, rather than Bivalence-based.)²⁵ So this really is an argument for suspension of classical *logic*, not just classical semantics.

Note too that the argument is for not endorsing LEM in our present state of information. It is not an argument that the Law allows counterexamples—that it is *false*. That view is indeed inconsistent with the most elementary properties of negation and disjunction, which entail the *double negation* of any instance of LEM.²⁶

3.2 But there is a problem—the advertised ‘awkward wrinkle’—with the Basic Revisionary Argument. It is: what justifies NKD? It may seem just obvious that we do not know that it is feasible to decide any significant question (what about vagueness, backwards light cones, Quantum Mechanics, Goldbach, the Continuum Hypothesis, etc.?) But for the anti-realist, though not for the realist, this modesty needs to be able to stand alongside our putative knowledge of EC. And there is a doubt about the stability of that combination.

To see the worry, ask: what does it take *in general* to justify the claim that a certain statement is not known? The following seems a natural *principle of agnosticism*:

(AG) P should be regarded as unknown just in case there is some possibility Q such that if it obtained, it would ensure not- P , and

²⁵ Actually, as Tim Williamson has reminded me, this point depends on how reasoning by cases (disjunction elimination) is formulated. If ‘ $P \vee Q$ ’ is super-true and so is each of the conditionals, ‘ $P \rightarrow R$ ’ and ‘ $Q \rightarrow R$ ’, then so is R . That is ungainsayable, and enough to sustain the proof in footnote 30 and the letter of the argument of the text, that one who believes that EC and NKD are each known should be agnostic about LEM. However reasoning by cases fails from the supervaluational perspective if the required auxiliary lemmas take the form

$$P \vdash R, Q \vdash R,$$

rather than the form

$$\vdash P \rightarrow R, \vdash Q \rightarrow R$$

A counterexample would be the invalidity of the inference from

$$‘P \vee \neg P’ \text{ to } ‘\text{Definitely } P \vee \text{Definitely } \neg P’,$$

notwithstanding the validity of each of

$$P \vdash \text{Definitely } P,$$

and

$$\neg P \vdash \text{Definitely } \neg P$$

(From the supervaluational perspective, we lose the inference from

$$P \vdash \text{Definitely } P$$

to

$$\vdash P \rightarrow \text{Definitely } P$$

so that the premisses for the form of disjunction elimination that is supervaluationally sound are unavailable in the particular instance. Cf. Williamson 1994 p. 152 and Fine 1975, p. 290.

²⁶ Here is the simplest proof. Suppose $\neg[P \vee \neg P]$. And now additionally suppose P . Then $P \vee \neg P$ by disjunction introduction—contradiction. So $\neg P$, by *reductio*. But then $P \vee \neg P$ again by disjunction introduction. So $\neg\neg(P \vee \neg P)$. This proof is, of course, intuitionistically valid.

such that we are (warranted in thinking that we are) in no position to exclude Q .²⁷

If AG is good, then justification of NKD will call for a Q such that, were Q to obtain, it would ensure that

$$\neg \forall P(\text{FeasK}(P) \vee \text{FeasK}(\neg P)).$$

And now the problem is simply that it would then follow that there is some statement such that neither it nor its negation is feasibly knowable—which in turn, in the presence of EC, entails a contradiction. So given EC, there can be no such appropriate Q .²⁸ So given EC and AG, there can be no justifying NKD. Thus the intuitive justification for NKD is, seemingly, not available to the anti-realist.

3.3 There is a response to the problem which I believe we should reject. What NKD says is that it is not known that *all* statements are such that either they or their negations may feasibly be known. So an AG-informed justification of NKD, will indeed call for a Q such that, if Q holds, *not all* statements, P , are such that $\text{FeasK}(P) \vee \text{FeasK}(\neg P)$. But the advertised contradiction is in effect derived from the supposition that *some particular* P is such that $\neg(\text{FeasK}(P) \vee \text{FeasK}(\neg P))$. So to refer that contradiction back to the above, we need the step from $\neg \forall P(\dots P \dots)$ to $\exists P \neg(\dots P \dots)$ —a step which is, of course, not generally intuitionistically valid. In other words: provided the background logic is intuitionistic, no difficulty has yet been disclosed for the idea that there are grounds for NKD which are consistent with AG.

The trouble with this, of course, is that we precisely may not take it that the background logic *is* (already) intuitionistic; rather the context is one in which we are seeking to capture an argument to the effect that it *ought* to be (at least to the extent that LEM is not unrestrictedly acceptable.) Obviously we cannot just help ourselves to distinctively intuitionistic restrictions in the attempt to stabilise the argument if the argument is exactly intended to motivate such restrictions.

A better response will have to improve on the principle AG. Specifically it will need to argue that it is not in general necessary, in order for a claim of ignorance whether P to be justified, that we (recognise that we) are in no position to exclude circumstances Q under which not- P

²⁷ If 'are in no position to exclude' means: do not know that not, then of course this principle uses the notion it constrains—but that is not to say that it is not a correct constraint.

Admirers of 'relevant alternatives' approaches to knowledge may demur at the generality of (AG) as formulated; but it will make no difference to the point to follow if 'there is some possibility Q ' is replaced by 'there is some *epistemically relevant* possibility Q ', or indeed any other restriction.

²⁸ Epistemically relevant or otherwise.

would be true—that, at least in certain cases, it is possible to be in position to exclude any such *Q* while *still* not knowing or being warranted in accepting *P*.

And of course it is actually obvious that the intuitionist/anti-realist needs such an improved account in any case. For while the right-hand-side of AG is presumably uncontentious as a *sufficient* condition for ignorance, it cannot possibly give an acceptable *necessary* condition in any context in which it is contemplated that the *double negation* of *P* may not suffice for *P*. In any such case, we may indeed be in a position to rule out any *Q* sufficing for not-*P*, yet still not in a position to affirm *P*. What the anti-realist needs, then, is a conception of *another* sufficient condition for ignorance which a thinker can meet even when in position to exclude the negation of a target proposition. And that there is this type of sufficient condition needs to be appreciable independently and—since we are seeking this in order to refurbish an argument for revising classical logic—in advance of an endorsement of any broadly intuitionistic understanding of the logical constants.

Is there any such alternative principle of ignorance? Our third problem²⁹ is the challenge to make out that there is and thereby to stabilise the Basic Revisionary Argument.

4. Revisionism saved

4.1 We shall work on the problems in reverse order. To begin with, then, how might AG fail—how might someone reasonably be regarded as ignorant of the truth of a proposition who rightly considered that they were in a position to exclude (any proposition entailing) its negation?

A suggestive thought is that a relevant shortcoming of AG is immediate if we reflect upon examples of indeterminacy.³⁰ Suppose we take the simplest possible view of indeterminacy—what I will call the *third possibility view*: that indeterminacy consists/results in some kind of status other than truth and falsity—a *lack* of truth-value, perhaps, or the possession of some other truth-value. Then it is obvious—at least on one construal of negation, when not-*P* is true just when *P* is false—how being in position to exclude the negation of a statement need not suffice for knowledge of that statement. For excluding the negation would

²⁹ Of course friends of classical logic are not likely to perceive this as a *problem*.

³⁰ Under this heading I mean at this point to include both linguistic vagueness—the phenomenon, whether semantic, or epistemic, or however it should be understood, which is associated with the Sorites paradox—and also indeterminacy *in re*, as might be exhibited by quantum phenomena, for instance, or the future behaviour of any genuinely indeterministic physical system.

leave open *two* possibilities: that *P* is true and that it is indeterminate—that it lacks, or has a third, truth-value. Hence if that were the way to conceive of indeterminacy, we should want to replace AG with, as a first stab, something like:

(AG*) *P* should be regarded as unknown just in case *either* there is some possibility *Q* such that if it obtained, it would ensure not-*P*, and such that we are (warranted in thinking that we are) in no position to exclude *Q* or *P* is recognised, in context, to be indeterminate.

This (in one form or another very widespread³¹) conception of indeterminacy is however, in my view, *un premier pas fatal*. It is quite unsatisfactory in general to represent indeterminacy as any kind of determinate truth-status—any kind of middle situation, contrasting with both the poles (truth and falsity)—since one cannot thereby do justice to the absolutely basic datum that in general borderline cases come across as hard cases: as cases where we are baffled to choose between conflicting verdicts about which polar verdict applies, rather than as cases which we recognise as enjoying a status inconsistent with both. Sure, sometimes people may non-interactively agree—that is, agree without any sociological evidence about other verdicts—that a shade of colour, say, is indeterminate (though I do not think it is clear what is the *content* of such an agreement); but more often—and more basically—the indeterminacy will be initially manifest not in (relatively confident) verdicts of indeterminacy but in (hesitant) differences of opinion (either between subjects at a given time or within a single subject's opinions at different times) about a polar verdict, which we have no idea how to settle—and which, therefore, we do not recognise as wrong.

In any case, even if indeterminacy is taken to be third-possibility indeterminacy, AG* is indistinguishable from AG in the present dialectical setting. The standard anti-realist/intuitionist semantics for negation will have it that *P*'s negation is warranted/known just when the claim is warranted/known that no warrant for/knowledge of *P* can be achieved.³² It follows that for the intuitionist/anti-realist, *recognisable*

³¹ It is a common assumption, for instance, both of any supervaluational theorist of vagueness who accepts it as part of the necessary background for a supervaluational treatment that vague statements give rise to a class of cases in which we may stipulate that they are true, or that they are false, without (implicit) reclassification of any case in which they would actually be true, or false; and of defenders of degree-theoretic approaches (in accepting that there are statements which are neither wholly true nor wholly false.)

³² This account of negation is actually enforced by EC and the Disquotational Scheme—see

third-possibility indeterminacy would be a situation where the negation of the relevant statement should be regarded as holding and is hence no ground for agnosticism about anything. (*Unrecognisable* third-possibility indeterminacy, for its part, would be a solecism in any case, in the presence of EC for the discourse in question.)

4.2 A better conception of indeterminacy will allow that it is not in general a determinate situation and that indeterminacy about which statement, *P* or its negation, is true, is not to be conceived as a situation in which neither is. The latter consideration actually enjoins the former. For to comply with the latter, indeterminacy has to be compatible both with *P* and with its negation being true and clearly no determinate truth-status can be so compatible: if it is a truth-conferrer for either, it is inconsistent with the other; if it is a truth-conferrer for neither, then neither is true, and contradictions result (at least in the presence of the Disquotational Scheme) To reject the third possibility view is thus to reject the idea that in viewing the question, whether *P*, as indeterminate, one takes a view with any direct bearing on the question of the truth-value of *P*. I know no way of making that idea intelligible except by construing indeterminacy as some kind of *epistemic* status.

To accept this view—I shall call it the *Quandary view*—is, emphatically, less than to subscribe to the Epistemic Conception of vagueness, according to which vague expressions do actually possess sharp, albeit unknowable limits of extension. But it is to agree with it this far: that the root characterization of indeterminacy will be by reference to *ignorance*—to the idea, as a starting characterization, of cases where we do not know, do not know how we might come to know, and can produce no reason for thinking that there is any way of coming to know what to say or think, or who has the better of a difference of opinion.³³ The crucial question how a Quandary view of indeterminacy can avoid becoming a version of the Epistemic Conception will exercise us in due course.

How does AG look in the context of the Quandary view? Consider for *P* a borderline-case predication of ‘red’. The materials about it which the Quandary view, as so far characterized, gives us are that we

Wright 1992, chapter 2.

³³ All three clauses are active in the characterization. If a subject does not know the answer to a question nor have any conception of how it might be decided, she is not thereby automatically bereft of any ground for thinking it decidable. One such ground might be to advert to experts presumed to be in position to resolve such a question. Another might be some general reason to think that such questions were decidable, even while lacking any specific idea of how. Neither will be available in the range of cases on which we shall shortly focus—simple predications of colour of surfaces open to view in good conditions. A difference of descriptive inclination in such a case

do not know, do not know how we might come to know, and can produce no reason for thinking that there is any way of coming to know whether the item in question is correctly described as 'red'. Now if what we are seeking to understand—in our attempt to improve on AG—is how someone could remain ignorant of the correctness of this predication who already knew that no *Q* inconsistent with it was true, then clearly the Quandary view helps not at all. For if I knew that no *Q* entailing not-*P* was true, that would surely be to *resolve* the indeterminacy, since it would rule out the case of not-*P* and—on the Quandary view, though not the Third Possibility view—no other case than *P* is then provided for. If all I am given is, not some additional possibility *besides P* and not-*P* but merely that I do not know, and do not know how to know, and can produce no reason for thinking that there is any way of coming to know which of them obtains, then there seems to be no obstacle to the thought that to learn that one does *not* obtain would be to learn that the other does.

4.3 The situation interestingly changes, however, when we consider not simple indeterminate predications like '*x* is red' but *compounds* of such indeterminate components, as conceived under the Quandary view. In particular the Basic Revisionary Argument, that LEM is not known to hold in general, arguably becomes quite compelling when applied to instances of that principle whose disjuncts are simple ascriptions of colour to surfaces in plain view. It is a feature of the ordinary concept of colour that colours are *transparent* under suitable conditions of observation: that if a surface is red, it—or a physical duplicate³⁴—will appear as such when observed under suitable conditions; *mutatis mutandis* if it is not red. Colour properties have essentially to do with how things visually appear and their instantiations, when they are instantiated, may always in principle be detected by our finding that they do indeed present appropriate visual appearances. So, according to our ordinary thinking about colour—though not of course that of defenders of the Epistemic Conception—EC is inescapable in this setting: when *x* is any coloured surface in plain view under what are known to be good conditions, each of the conditionals:

among otherwise competent and properly functioning subjects is not open to adjudication by experts, nor do we have any general reason to think that the issue must be adjudicable in principle, in a way beyond our present ken. To be sure, we are forced to say so if we cling to the Law of Excluded Middle while retaining the belief that these predications are subject to EC. But then—again—we owe a ground for LEM consistent with that belief. I shall add a fourth clause in due course.

³⁴ The complication is to accommodate 'altering'—the phenomenon whereby implementing the very conditions which would normally best serve the observation of something's colour might, in special cases, actually change it. Rapid-action Chameleons would be an example.

if x is red, that may be known,
and
if it is not the case that x is red, that may be known,
is known.

Now EC for redness, so formulated, would of course be inconsistent with recognisable third possibility indeterminacy: with our recognition, of a particular such x , that it could not be known to be red and could not be known not to be red. But it is perfectly consistent with our recognition merely that among some such possible predications, there will be a range where we do not know, and do not know how we might come to know, and can produce no reason for thinking that there is any way of coming to know whether the objects in question are red or not—it is only knowledge that we *cannot* know that is foreclosed. (If we could know that we couldn't know, then we would know that someone who took a view, however tentative—say that x was red—was wrong to do so. But we do *not* know that they are wrong to do so—the indeterminacy precisely leaves it open.) The key question is therefore the status of NKD as applied to these predications: the thesis that the disjunction, that it is feasible to know P or feasible to know not- P , is not known to hold for all P in the range in question. Sure, in the presence of EC, it cannot be that—so we cannot know that—*neither* disjunct is good in a particular case; that's the point just re-emphasised. But we surely do know of suitable particular instances—particular sample surfaces, in good view—that we do not know, and do not know how we might know, and can produce no reason for thinking that there is any way of coming to know what it is correct to say of their colour or who has the better of a dispute. And it may therefore seem plain that, the contradictoriness of its negation notwithstanding, we are thus in no position to affirm of such an instance, x , that the disjunction, that either it is feasible to know that x is red or it is feasible to know that it is not the case that x is red, may be known. Since LEM—in the presence of EC—entails that disjunction, it follows—granted that there is a compelling case for EC over the relevant subject matter—that we should not regard LEM as known.

4.4. But there is a lacuna in this reasoning. An awkward customer may choose to query the passage from the compound ignorance described by the three conditions on Quandary to the conclusion that we do not know the target disjunction, that either it is feasible to know that x is red or it is feasible to know that it is not the case that x is red. Suppose I do not know, and do not know how I might know, and can produce no

reason for thinking that there is any way of coming to know that *P*; likewise for not-*P*. Then I might—loosely—describe myself as not knowing, and not knowing how I might know, and able to produce no reason for thinking that there is any way of coming to know what it is correct to think about *P* or who has the better of a dispute about it. Still, might I not have all those three levels of ignorance and still know that it is the case *either that P is knowable or that its negation is*? For not knowing what it is correct to think about *P* might naturally be taken as consisting in the conjunction: not knowing that it is correct to think *P* and not knowing that it is correct to think not-*P*; likewise not knowing who has the better of a difference of opinion about *P* might be taken as the conjunction: not knowing that the proponent of *P* has the better of it and not knowing that the proponent of not-*P* has the better of it. And all that, of course, would still be consistent with knowing that there *is* a correct verdict—that *someone* has the better of the dispute.

The objection, then, is that it does not strictly follow from the too-informal characterization offered of Quandary that if 'x is red' presents a quandary, then we have no warrant for the disjunction,

$$\text{FeasK}(x \text{ is red}) \vee \text{FeasK}(\text{it is not the case that } x \text{ is red})$$

All that follows, the awkward customer is pointing out, is that we are, as it were, thrice unwarranted in holding either disjunct. To say that someone does not know whether *A* or *B*, is ambiguous. Weakly interpreted, it implies, in a context in which it is assumed that *A* or *B* is true, that the subject does not know which. Strongly interpreted, it implies that the subject does not know that the disjunction holds. The objection is that we have illicitly mixed this distinction: that to suggest that to treat borderline cases of colour predicates as quandaries enjoins a reservation about the displayed disjunction is to confuse it. It is uncontroversial that such examples may be quandaries if that is taken merely to involve ignorance construed as an analogue of the weak interpretation of ignorance whether *A* or *B*. But to run the Basic Revisionary Argument, a case needs to be made that borderline cases of colour predicates present quandaries in a sense involving ignorance under the strong interpretation. What is that case?

A first rejoinder would be to challenge the objector to say, in the examples that concern us, what if any ground we possess for the claim that our ignorance *goes no further* than the weak interpretation—what residual ground, that is, when *x* is a borderline case of 'red', do we have for thinking that the disjunction,

$\text{FeasK}(x \text{ is red}) \vee \text{FeasK}(\text{it is not the case that } x \text{ is red})$

is warranted? It will not do, to stress, to cite its derivation from EC and classical logic—not before a motivation for classical logic is disclosed consistent with EC. Yet no other answer comes to mind.

However a second, decisive consideration is to hand if I am right in thinking that the kind of quandary presented in borderline cases has so far been under-described. As stressed, it is crucial to the conception of indeterminacy being proposed that someone who takes a (presumably tentative) view for or against the characterizability of such a case as ‘red’ is *not known to be wrong*. But that is consistent with allowing that it is also not known whether knowledge, one way or the other, about the redness of the particular case is even *metaphysically possible*—whether there is metaphysical space, so to speak, for such an opinion to constitute knowledge. I suggest that we should acknowledge that borderline cases do present such a fourth level of ignorance: that, when a difference of opinion about a borderline case occurs, one who feels that she has no basis to take sides should not stop short of acknowledging that she has no basis to think that anything amounting to knowledge about the case is metaphysically provided for. And if that is right, then there cannot be any residual ground for regarding the above disjunction as warranted. The strong interpretation of our ignorance whether it is feasible to know that x is red or feasible to know that it is not the case that x is red, is enforced.

4.5 Let’s take stock. Our project was to try to understand how it might be justifiable to refuse to endorse a claim in a context in which we could nevertheless exclude the truth of its negation. For the case of simple predications of colour on surfaces open to view in good conditions, the situation is seemingly this:

- (i) that what I termed the transparency of colour enjoins acceptance of EC, in the form of the two ingredient conditionals given above;
- (ii) that we know that there is a range of such predications where we do not know nor have any idea how we might come to know whether or not they are correct, and moreover where we can produce no independent reason for thinking that there must be a way of knowing, or even reason to think that knowledge is metaphysically possible.

Nevertheless

- (iii) we have a perfectly general disproof of the negation of LEM.
(see footnote 26)

If we now essay to view the latter as a proof of LEM, something will have to give: either we must reject the idea that even simple colour-predications obey EC—specifically its two ingredient conditionals—and so reject the transparency of colour or we must repudiate (ii), treating the putative proof of LEM precisely as a ground for the claim that there must be a way of adjudicating all borderline colour predications. But, again, it just seems plain that the proof does not show *that*; what it shows is merely that denial of the law cannot consistently be accommodated alongside the ordinary rules for disjunction and *reductio ad absurdum*. The move to ‘So one of the disjuncts must be knowably true’ should seem like a complete *non sequitur*.

If that is right, then one who accepts both the transparency of colour and that borderline cases present quandaries as most recently characterized must consider that there is no warrant for LEM as applied to colour predications generally—even though the negation of any instance of it may be disproved—and hence that double-negation elimination is likewise without warrant. Thus there *has* to be a solution to the problem the Intuitionist has with the Basic Revisionary Argument if it is ever right to accept EC for a given class of vague judgments and simultaneously allow that some of them present quandaries. And the solution must consist in the disclosure of a better principle of ignorance than AG.

4.6 Does the example of colour guide us towards a formulation of such a principle? According to AG it is a necessary and sufficient for a thinker’s ignorance of *P* that there be some circumstances *Q* such that if *Q* obtained, not-*P* would be true and such that the thinker has no warrant to exclude *Q*. The improved principle the anti-realist needs will allow this to be a sufficient condition, but will disallow it as necessary. Here is a first approximation. Consider any compound statement, *A*, whose truth requires that (some of) its constituents have a specific distribution of truth-values or one of a range of such specific distributions. And let the constituents in question be subject to EC. Then

- (AG⁺) *A* is known only if there is an assurance that a suitably matching distribution of evidence for (or against) its (relevant) constituents may feasibly be acquired.^{35, 36}

³⁵ As it stands this—more specifically, its contrapositive—provides a second sufficient condi-

A purported warrant for a compound statement meeting the two stated conditions thus has to ground the belief that some appropriate pattern of evidence may be disclosed for its constituents. In particular, nothing is a basis for knowledge of a disjunction which does not ensure that at least one of the disjuncts passes the evidential constraint in its own right. More generally, when the truth of any class of statements is evidentially constrained, knowledge of statements compounded out of them has to be conservative with respect to the feasibility of appropriate patterns of knowledge of their constituents. One may thus quite properly profess ignorance of such a compound statement in any case where one has no reason to offer why an appropriate pattern of knowledge for its constituents should be thought achievable.

The great insight of the Mathematical Intuitionists—and the core of their revisionism—was that a thinker may simultaneously both lack any such reason and yet be in a position to refute the *negation* of such a compound using only the most minimal and uncontroversial principles governing truth and validity. The proof of the double negation of LEM sketched in footnote 26, for instance, turns only on the standard rules for disjunction, *reductio ad absurdum* in the form that no statements collectively entailing contradictory statements can all be true, and the principle (enjoined, remember, by the Equivalence Schema) that the negation of a statement is true just in case that statement is not. These principles are themselves quite neutral on the question of evidential constraint but are arguably constitutive of the content of the connectives—disjunction and negation—featuring in LEM. The assurance they provide of the validity of its double negation is thus ungainsayable. But when the truth of the ingredient statements is taken to involve evidential constraint, then that assurance does not in general amount to a reason to think that the appropriate kind of evidence for one disjunct or the other must in principle be available in any particular case. The assurance falls short in quandary cases—like borderline cases of simple colour predications—where we do not know what to say, do not know how we might find out, and can produce no reason

tion for ignorance, restricted to the kind of compound statement it mentions. That is all that is necessary to explain how someone can be properly regarded as ignorant of a statement who, by being in position to discount any *Q* inconsistent with that statement, fails to meet the other sufficient condition of ignorance offered by AG.

³⁶ This is, to stress, only a first approximation to a full account of the principle required. Quantified statements, for instance, do not literally have constituents in the sense appealed to by the formulation—though it should be straightforward enough to extend the formulation to cover them. More needs to be said, too, about how the principle should apply to compounds in which negation is the principal operator. But the provisional formulation will serve the immediate purpose.

for thinking that there is a way of finding out or even that finding out is metaphysically possible.

Quandaries are not, of course, restricted to cases of vagueness as usually understood. They are also presented, for instance, by certain unresolved but—so one would think—perfectly precise mathematical statements for which we possess no effective means of decision. So add the thought—whatever its motivation—that mathematical truth demands proof and there is then exactly the same kind of case for the suspension of classical logic in such areas of mathematics.³⁷ That is what the Intuitionists are famous for. But if the account I have outlined is sound, then—whether or not there are compelling reasons derived within the philosophy of meaning for regarding EC as globally true—there will always be a case for suspension of classical logic wherever locally forceful grounds for EC combine with the possibility of quandary.³⁸

5. An intuitionistic solution to the Sorites

5.1 Our problem was to make out how the Sorites reasoning could justly be treated as a *reductio* of its major premiss without our incurring an obligation to accept the unpalatable existential, and further—when the existential is unpalatable precisely because it seems to express the precision of the relevant predicate in the Sorites series—to explain how the major premiss might properly be viewed as a misdescription of what it is for that predicate to be vague. The essence of the solution that now suggests itself is that the vagueness of F should be held to consist not in the falsity of the unpalatable existential claim but precisely in its association with quandary in the sense latterly introduced.

To expand. Assume that F is like ‘red’ in that, though vague, predications of it are subject to EC. Then any truth of the form, $Fa \wedge \neg Fa'$, would have, presumably, to be recognisably true. The unpalatable existential, $\exists x(Fx \wedge \neg Fx')$, has only finitely many instances in the relevant type of (Sorites-)context. So its truth too would have to be recognisa-

³⁷ Note that this way of making a case for basic intuitionistic revisions needs neither any suspect reliance on AG nor appeal to specific non-truth-based proposals—in terms of assertibility-conditions, or conditions of proof—about the semantics of the logical constants. The key is the combination of epistemic constraint and the occurrence of quandary cases. Any *semantical* proposals offered can sound exactly the same as those of the classicist.

³⁸ An interesting supplementary question is now whether a revisionary argument might go through without actual *endorsement* of EC, just on the basis of agnosticism about it in the sense of reserving the possibility that it might be right. The line of thought would be this. Suppose we are satisfied that the outlined revisionary argument would work if we knew EC, but are so far open-

ble. And to recognise its truth would be to find an appropriate Fa and $\neg Fa'$ each of which was recognisably true. We know that there is no coherently denying that there is any such instance, since that denial is inconsistent, by elementary reasoning, with the data, $F(o)$ and $\neg F(n)$. But we also know that we cannot find a confirming instance so long as we just consider cases where we are confident respectively that Fa , or that $\neg Fa'$. Thus, if there is a confirming pair, Fa and $\neg Fa'$, it must accordingly be found among the borderline cases. If these are rightly characterized as presenting quandary—that is, if we do not know whether to endorse them, do not know how we might find out, and can produce no reason for thinking that there is, or even could be, a way of finding out—then the status of $\exists x(Fx \wedge \neg Fx')$ is *likewise* a quandary, notwithstanding the proof of its double negation. And the plausibility of its (single) negation, notwithstanding the paradox it generates, is owing to our misrepresentation of this quandary: we are prone to deny the *truth* of the unpalatable existential when we should content ourselves with the observation that all its instances in the series in question are either false or quandary-presenting—an observation that merits denial of no more than its (current or foreseeable) assertibility.

5.2 Again, it is crucial to this way with the problem that the quandary posed by borderline cases be exactly as characterized and in particular that it falls short of the certitude that there can be no deciding them. There can be no intuitionistic treatment of the Sorites unless we hold back from that concession. The indeterminacy associated with vague predicates has to fall short of anything that fits us with knowledge that one who takes a determinate—positive or negative—view of such an

minded—unpersuaded, for instance, that the usual anti-realist arguments for EC are compelling, but sufficiently moved to doubt that we know that truth is in general subject to *no* epistemic constraint. Suppose we are also satisfied that NKD, as a purely general thesis, is true: we have at present no grounds for thinking that we can in principle decide any issue. The key question is then this: can we envisage—is it rational to leave epistemic space for—a type of argument (which a global proponent of the revisionary argument thinks we already have) for EC which would ground its acceptance but would not improve matters as far as NKD is concerned? If the possibility of such an argument is open, then it must be that our (presumably a priori) grounds for LEM are *already* inconclusive—for what is open is precisely that we advance to a state of information in which EC is justified and yet in which NKD remains true. But in that case we should recognise that LEM already lacks the kind of support that a fundamental logical principle should have—for that should be support which would be robust in any envisageable future state of information.

That seems intriguing. It would mean that revisionary anti-realism might be based not on a positive endorsement of EC but merely on suspicion of the realist's non-epistemic conception of truth.

Would this provide a way of finessing Fitch's Paradox?—the well-known argument (Fitch 1963) that, in the presence of EC, it is contradictory to suppose that some truths are never known? No: if nothing else was said, the paradox would stand as a reason for doubting that it *is* rational to reserve epistemic space for a convincing global argument for EC.

example, however tentative, makes a mistake. For once we allow ourselves to cross that boundary—to rule out all possibility of finding a confirming instance of the unpalatable existential—EC, where we have it,³⁹ will enforce its denial and the paradox will ensue.

This limitation—that we lack the certitude that there can be no finding a validating instance of the unpalatable existential—may seem very difficult to swallow. Let it be that atomic predications of vague expressions present quandaries in just the sense characterized; in particular, that we do not know that there is no knowing that such a predication is true, or that it is false. Still, that both *P* and *Q* present quandaries is not in general a reason for regarding their conjunction as beyond all knowledge: if *Q* is not-*P*, for instance, we can know—one would think—that the conjunction is false even though each conjunct is a quandary. It may seem evident that instances of the unpalatable existential are in like case: that even if *Fx* and $\neg Fx'$ are quandaries, we *do* still know that there is no knowing that both are true. In general, quandary components are sure to generate quandary compounds only if verdicts on those components are mutually unconstrained; but the whole point about Sorites series is that adjacent terms lie close enough together to ensure that differential verdicts cannot be justified—*ergo* cannot be known.

Plausible as this train of thought may seem, it must be resisted—at least by a defender of EC for the range of predications in question. For suppose we knew that any adjacent terms in a Sorites series lie close enough together to ensure that differential verdicts about them cannot both be known. Then we would know that

$$\text{FeasK}(Fx) \rightarrow \neg \text{FeasK}(\neg Fx')$$

By EC, we have both

$$Fx \rightarrow \text{FeasK}(Fx)$$

and

$$\neg Fx' \rightarrow \text{FeasK}(\neg Fx')$$

So, putting the three conditionals together,

$$Fx \rightarrow \neg \neg Fx'$$

Hence, contraposing and collapsing the triple negation,⁴⁰

³⁹ Is EC always plausible for basic Sorites-prone predicates? It does seem to be a feature of all the usual examples. See concluding remarks below.

⁴⁰ The equivalence of triple to single negation is of course uncontroversial.

$$\neg Fx' \rightarrow \neg Fx$$

So if we think we know that any adjacent terms in a Sorites series lie close enough together to ensure that differential verdicts about them cannot both be known, we have to acknowledge that each non-*F* item in the series is preceded by another. Thus we saddle ourselves with a Sorites paradox again.⁴¹

Let me again stress the two morals:

- (i) EC plus knowledge of the *irresolubility* of borderline cases is a cocktail for disaster. Any compelling local motivation for EC with respect to a vague discourse enforces an acknowledgement that our ignorance with respect to the proper classification of borderline cases can extend no further than Quandary, as characterized, allows. We—innocent witnesses, as it were, to a difference of opinion—don't know what to say about such a case, don't know how to know, cannot produce any reason for think-

⁴¹ The general thrust of our discussion involves—as one would naturally expect of an advertised intuitionistic treatment—a heavy investment in EC. As I have said, I believe the principle is plausible for the kinds of statement that feature in the classic examples of the Sorites paradox—though the relationship between vagueness and evidential constraint is a crucial and relatively unexplored issue (see remarks at the end of the paper). But I should stress that I regard the conception of borderline cases which I am proposing, of which it is an essential feature that we do not know that there is no knowledgeable verdict to be returned about a borderline case, as plausible in dependently of the incoherence of its denial when EC is accepted. Let me quickly rehearse a further corroborative consideration.

According to the opposing view—the *verdict exclusion view*—a borderline case is something about which we know that a knowledgeable positive or negative verdict is ruled out. The verdict exclusion view would be imposed by the third possibility view, but whatever its provenance, it faces great difficulty in accommodating the intuitions that ground the idea of higher-order vagueness. For consider: if a (first-order) borderline case of *P* is something about which one can know that one ought to take an agnostic stance—a situation where one ought not to believe *P* and ought not to believe not-*P*—then (one kind of) a higher-order borderline case is presumably a situation where one can know that one ought not to believe *P* and ought not to believe that *P* is (first-order) borderline. Since on the view proposed *P*'s being first-order borderline is a situation where one ought not to believe *P* and ought not to believe not-*P*, it follows that, confronted with a higher-order borderline case, one can know that:

- (i) one ought not to believe *P*;

and

- (ii) one ought not to believe that one ought not to believe *P* and ought not to believe not-*P*.

However in moving in the direction of (putative) borderline cases of *P* and the first-order *P*/not-*P* borderline, we have moved *towards* *P*, as it were, and away from not-*P*. Since—according to the verdict exclusion view—the first-order borderline-cases were already cases where it could be known that

- (iii) one ought not to believe not-*P*,

it should follow that the relevant kind of higher-order borderline cases are likewise cases where (iii) may be known. So one gets into a position where one may knowledgeably endorse both (i) and (iii) yet simultaneously know—by dint of knowing (ii)—that one ought not to endorse their conjunction—a Moorean paradox (at best).

ing that there is any way of knowing nor even that there could be. But we do *not* know that there is none.

- (ii) EC plus knowledge of the *undifferentiability* of adjacents in a Sorites series—the unknowability of the truth of contrasting verdicts about them—is similarly explosive. So we must take it that, where the statements in question are quandaries, we do not know that verdicts of the respective forms, Fa and $\neg Fa'$, can never knowingly be returned. That allows each conjunction of such quandaries, $Fa \wedge \neg Fa'$, to be itself a quandary; whence we may infer that the unpalatable existential is also a quandary, by the reasoning outlined in 5.1.⁴²

5.3 What are we now in position to say about the following conditional:

$\exists x(Fx \wedge \neg Fx') \rightarrow 'F'$ is not vague,

rightly focused on by Timothy Chambers in recent criticism of Putnam (Chambers 1998)? If it is allowed to stand as correct, then — contraposing — any vague expression will be characterized by the negation of the antecedent and the all too familiar aporia will ensue. What fault does the broadly intuitionistic approach I have been canvassing have to find with it?

In sum: the idea that agnosticism is always mandated in borderline cases cannot make coherent sense of higher-order vagueness. The distinction between cases where a positive or negative view is mandated and cases where agnosticism is mandated cannot itself allow of borderline cases, on the verdict exclusion view. That is very implausible, and provides a powerful reason to be suspicious of the verdict-exclusion view.

This conclusion would be blocked, of course, if the verdict exclusion view were qualified: if it were conceded that agnosticism is only mandated for *some* borderline cases and that for others, perhaps less 'centrally' borderline, something like the permissibility-conception which I have been recommending—that in such cases those who incline to return positive or negative verdicts are not known to be incorrect but are, as it were, 'entitled to their view'—is the stronger account. Arguably, though, such a compromise would give the game away. For if the permissibility-conception is correct at least for cases towards the borderline between definite cases of P and—the alleged—definite cases on the borderline between P its negation, the question must immediately arise what good objection there could be to allowing the negation of P to cover the latter, agnosticism-mandating cases. None if they are conceived as by the third possibility view—for then they are exactly cases where P is other than—so not—true. But after that adjustment, the only remaining borderline cases would be just those where conflicting opinions were permissible, and the permissibility-conception would therefore seem to have the better case to capture the basic phenomenon.

⁴² Timothy Williamson's (see Williamson 1996a) otherwise cogent recent criticisms of Putnam—specifically, his *reductio* of the combination of Putnam's proposal about vagueness and the ideal-justification conception of truth which Putnam favoured at the time—precisely assume that our knowledge of the status of borderline cases extends far enough to let us know that there can be no justified differentiation of adjacents, even under epistemically ideal circumstances. But we have seen, in effect, that Putnam should refuse to grant that assumption. A would-be intuitionistic treatment of vagueness must respect the two morals just summarised.

Well, there is no fault to be found with it as a *conditional of assertibility*: to be in position to assert the antecedent with respect to the elements of a Sorites series must be to be in position to regard '*F*' as sharply defined over the series. So an intuitionist who insists on the familiar kind of assertibility-conditional semantics for the conditional, whereby ' $P \rightarrow Q$ ' is assertible just if it is assertible that any warrant for asserting *P* would be (effectively transformable into) a warrant for asserting *Q*, will be put in difficulty by Chambers' simple point. However that style of semantics is arguably objectionable in any case, obliterating as it does the distinction in content between the conditionals,

If *P*, then *Q*

and

If *P* is assertible, then *Q*.⁴³

What is wrong with the Chambers conditional from our present perspective is rather that, if its antecedent—the unpalatable existential—is rightly regarded as presenting a quandary in cases where *F* is vague in the series in question, then it is not something whose truth we are in a position to exclude. So for all we know, the antecedent of the Chambers conditional may be true while its consequent is false; for *F* is vague by hypothesis. So there is—as there needs to be—principled cause to regard the conditional as unacceptable.⁴⁴

This is not inconsistent with allowing that the unpalatable existential does indeed characterize what it is for *F* to be *precise* relative to the series of objects in question. But if that is insisted upon, then we learn that it was a mistake to view vagueness as entailing a *lack of precision*. Rather, the vagueness of a predicate involves the combined circumstances that atomic predications of it are prone to present quandary and that we are unwarranted in regarding Bivalence/Excluded Middle as valid for such predications. Vagueness so conceived is an epistemic notion; precision, if enjoined by the truth of the unpalatable existential, is a matter of ontology—of actual sharpness of extension. I'll return to the issue of the characterization of vagueness below.

⁴³ This assumes that '*P*' and '*P* is assertible' are always co-warranted.

⁴⁴ A skirmish about this is possible. If the unpalatable existential is justly regarded as a presenting a quandary, then we shouldn't rule out the possibility of coming to know that $\exists x(Fx \wedge \neg Fx')$ is true. But if we did know it, we should presumably not then know that the relevant predicate, *F*, is vague—for we would know that it was sharply bounded in the series in question. So it seems we can rule out

(*) $\exists x(Fx \wedge \neg Fx')$ & '*F*' is vague

5.4 Earlier we set two constraints on a treatment of the Sorites: it was to be explained

- (i) how the falsity of $\neg\exists x(Fx \wedge \neg Fx')$ can be consistent with the vagueness of F ; and
- (ii) how and why it can be a principled response to refuse to let $\neg\neg\exists x(Fx \wedge \neg Fx')$ constitute a commitment to the unpalatable existential, and hence—apparently—to the precision of F .

The answers of the present approach, in summary, are these. The major premiss for the Sorites may unproblematically be denied, without betrayal of the vagueness of F , if F 's vagueness is, in the way adumbrated, an epistemic property—if it consists in the provision of quandary by some of the atomic predications of F on objects in the series in question. And such a denial need be no commitment to the unpalatable existential—or other classical equivalents of that denial which seem tantamount to the affirmation of precision—if the latter are also quandaries and are thus properly regarded as objects of agnosticism. Rather, the classical-logical moves which would impose such commitments are to be rejected precisely because they allow transitions from known premisses to quandary conclusions.⁴⁵

as a feasible item of knowledge. And now, if (*) is subject to EC, it follows that it is false and hence—again, an intuitionistically valid step—that the Chambers conditional holds after all. (I am grateful to Timothy Williamson for this observation.)

On the other hand, if (*) is *not* subject to EC; then the question is why not—what principled reason can be given for the exception when so much of our discussion has moved under the assumption that many contexts involving vague expressions are so?

The answer is that (*) cannot be subject to EC—at least in the simple conditional form in which we have been considering that principle—for just the reason that Fitch's well-known counterexamples cannot be. These counterexamples are all contingent conjunctions where knowledge of one conjunct is inconsistent with knowledge of the other. The simplest case is: P and it is not known that P . Knowledge of the second conjunct would require—by the factivity of knowledge—that the first conjunct was not known; but if the conjunction could be known, so could each conjunct simultaneously. Hence EC must fail if the Fitch schema has true instances. It now suffices to reflect that, on the conception of vague expressions as giving rise to quandary, (*) is merely a more complex Fitch case. For to know that ' F ' is vague is to know that predications of it give rise to quandaries in a series of the appropriate kind and hence—by the reasoning sketched in the second paragraph of 5.1—that the unpalatable existential is itself a quandary and hence is not known. Of course this comparison would not be soothing for someone sympathetic to the sketched intuitionistic response to the Sorites who was also a proponent of EC *globally*. But there is no evident reason why the viability of the intuitionistic response to the Sorites should depend upon the global proposition. For one for whom the case for EC always depends on the nature of the local subject matter, there should be no discomfort in recognising that 'blind-spot' truths—truths about truths of which we are, *de facto* or essentially, ignorant—will provide a region of counterexamples to EC.

⁴⁵ The reader should note that no ground has been given for reservations about Double Negation Elimination as applied to atomic predications, even in quandary-presenting cases. For—in contrast to the situation of the double negation of the unpalatable existential—no purely logical

to be rejected precisely because they allow transitions from known premisses to quandary-conclusions.

6. Relativism stabilised

6.1 Our problem was to block both the apparent lesson of the Simple Deduction, that any dispute about a truth-apt content involves a mistake, and that of the EC-Deduction, that any dispute about an evidentially constrained truth-apt content involves a substantive cognitive shortcoming—so that, at least with subject-matters constrained by EC, the intended gap between minimal truth aptitude and cognitive command collapses. It should now be foreseeable how a principled response to these awkward arguments may run.

The truth is that each Deduction is actually fine, as far as it goes—(to the stated line 8 in the case of the Simple Deduction, and line 10 in the case of the EC-Deduction.) The problem, rather, consists in a *non sequitur* in the way their conclusions were *interpreted*. Take the EC-Deduction. (The response to the Simple Deduction is exactly parallel.) What is actually put up for *reductio* is the claim that a certain dispute involves no cognitive shortcoming. That is a negative existential claim, so the *reductio* is in the first instance a proof of *its* negation, i.e. a doubly negated claim: that it is not true that *A*'s and *B*'s conflicting opinions involve no cognitive shortcoming. This is indeed established a priori (if EC is locally a priori). However to achieve the alleged demonstration of cognitive command—that is it a priori that cognitive shortcoming is involved—we have first to eliminate the double negation. And the needed DNE step, like that involved in the classical ‘proof’ of LEM and the Sorites-based proof of the unpalatable existential, involves a violation of AG^+ . As the reader may verify, the reasoning deployed in the EC-Deduction up to its conclusion at line 10 draws on no resources additional to those involved in the proof of the double negation of LEM save *modus ponens* and the suggestion that one who holds a mistaken view of a knowable matter is *per se* guilty of cognitive shortcoming. Neither of those additions seems contestable, so the EC-Deduction should be acknowledged as absolutely solid. However the transition from its actually doubly negated conclusion to the advertised, double-negation-eliminated result—that cognitive command holds wherever conflict of opinion is possible—demands, in the presence of EC, that

case will be available to enforce acceptance of $\neg\neg Fa$ in a case where *Fa* presents a quandary. However an acceptance of DNE for vague atomic predications will, not, of course, enforce an acceptance of the Law of Excluded Middle for them. (Recall that the proof of the equivalence of DNE and LEM requires that the former hold for *compound* statements, in particular for LEM itself.)

there be an *identifiable* shortcoming in *A*'s and *B*'s conflicting opinions—for the shortcoming precisely consists in holding the wrong view about a knowable matter. If the example is one of quandary, the DNE step is thus a commitment to the view that an error may be identified in a case where we do not know the right opinion, do not know how we might know, and have no general reason to suppose that there is, or could be, a way of knowing nonetheless. Once again, the logical and other resources involved in the simple proof (up to line 10) seem manifestly inadequate to sustain a conclusion with that significance. So although indeed in position to rule out the suggestion that any disagreement is cognitively blameless, just as the two Deductions show, we remain—in the light of the enhanced principle of ignorance AG⁺—unentitled to the claim that there will be cognitive shortcoming in any difference of opinion within a minimally truth-apt discourse. We remain so unentitled precisely because that would be a commitment to a *locatability* claim for which the proof of the double negation provides no sufficient ground and for which we have, indeed, no sufficient ground.

The immediate lesson is that it is an error (albeit a natural one) to characterize failures of cognitive command—or indeed what is involved in True Relativism generally—in terms of the possibility of blameless differences of opinion.⁴⁶ Indeed, it is the same root error as the characterization of failures of Bivalence in terms of third possibilities, truth-value gaps, and so on. Failures of cognitive command, like failures of Bivalence, must be viewed as situations where we *have no warrant* for a certain claim, not ones where—for all we know—its negation may be true. We *do* know—the two Deductions precisely teach—that the negation will not be true. But that's not sufficient for cognitive command. The distinction once again turns on the intuitionistic insight that one may, in contexts of evidential constraint and potential quandary, fall short of knowledge of a claim whose negation one is nevertheless in position to exclude.

The point does not depend on the sources of any potential quandary. But my implicit proposal in *Truth and Objectivity*—the reason why the cognitive command constraint was formulated so as to exempt disagreements owing to vagueness—was that it is a feature of discourse concerning the comic, the attractive, and the merely minimally truth-apt generally, that differences of opinion in such regions may present quandaries for reasons *other than* vagueness. It is not (just) because

⁴⁶ Regrettably, the error is encouraged by the wording of some passages in *Truth and Objectivity*. See for instance pp. 94 and 145.

‘funny’ and ‘delicious’ are vague in the way ‘red’ is that the kind of differences of opinion about humour and gastronomy are possible which we do not know how to resolve, do not know how we might get to know, and do not know that there is, or could be, any getting to know. Merely minimally truth-apt discourses, in contrast with discourse exerting cognitive command, provide examples of indeterminacy *in re*. But we need to correct the usual understanding of this, epitomised by the rhetoric of phrases like ‘no fact of the matter’. That rhetoric, it should now be superfluous to say, is simply inconsistent with the most basic constitutive principles concerning truth and negation. The indeterminacy consists rather in the fact that provision exists for quandaries which, because they arise in contexts governed by evidential constraint, enforce agnosticism about principles—like Bivalence—which if they could be assumed to hold, would ensure that there was a ‘fact of the matter’, about which we would merely be ignorant. It is a matter, if you like, of lack of warrant to believe in a fact of the matter, rather than a reason to deny one—a subtle but crucial distinction whose intelligibility depends on a perception of the inadequacy of AG and the basic intuitionistic insight.

7. Epistemic indeterminacy

7.1 Let me return to the issue of the relation between the epistemic conception of indeterminacy I have been proposing and the rampantly realist Epistemic Conception. Writing in criticism of Williamson’s and Sorensen’s respective defences of the latter, I once observed that

Perhaps the most basic problem for the indeterminist—the orthodox opponent of the Epistemic Conception—is to characterize what vagueness consists in—to say what a borderline case is. It is also one of the least investigated. The epistemic conception should not be allowed to draw strength from this neglect. There is no cause to despair that the situation can be remedied (Wright 1995, p. 146).

Well, how close do the foregoing considerations come to remedying the situation? My proposal in that earlier paper was that borderline cases of *F* should be characterized in the natural way, using an operator of definiteness, as cases which are neither definitely *F* nor definitely not-*F* but—prefiguring what I have been suggesting here—that the definiteness operator should be construed epistemically, with genuine borderline cases marked off from determinate matters lying beyond our ken—including borderline cases as conceived by the Epistemicist—by examples’ of the latter sort being characterized by

the principle of Bivalence, there characterized as the hypothesis of ‘universal determinacy in truth-value’ (Wright (1995 p. 145).

Williamson later responded:

So far the parties do not disagree; the epistemicist has merely said more than the indeterminist. But that is not the only difference between them. The indeterminist regards the epistemicist’s account of borderline cases as *positively incorrect* [my emphasis]. The epistemicist is supposed to regard borderline claims as determinate in truth-value, while the indeterminist regards them as not determinate in truth-value. (Williamson 1996b p. 44.)

This gloss on the differences between the protagonists enabled Williamson to advance the following line of criticism. Part of the indeterminist characterization of borderline claims is that they are not determinate in truth-value. What does ‘determinate’ mean? If not being determinate in truth-value involves *lacking* a truth value, then we are back with third-possibility indeterminacy. But ‘not determinate in truth value’ cannot just mean ‘not definitely true and not definitely false’ since that claim — with ‘definitely’ understood epistemically, as now by both sides in the dispute — is one the Epistemicist is prepared to make; whereas the denial of determinacy was supposed to crystallise a point of disagreement between the indeterminist and the Epistemicist. So, Williamson concluded, the indeterminist bugbear — of giving some non-epistemic account of borderline cases — recurs.

This was a curious criticism, given that the notion of determinacy in truth-value was involved in the first place only as a paraphrase of the principle of Bivalence. For in that case, Williamson’s supposition that my indeterminist was someone who regarded borderline claims as not determinate in truth value would be equivalent to attributing to her the thesis that Bivalence *failed* for such claims. And then, given that I explicitly did not want any traffic with third possibilities, Williamson would have had a much more forceful criticism to make than merely that the implicated notion of determinacy had still not been properly explained.

In fact, however — the important point for our present concerns — Williamson mischaracterized the opposition in the first place. It was a misunderstanding to suppose that the ‘indeterminist’ — my theorist in the earlier paper — regarded borderline claims as ‘not determinate in truth value’. Rather, the difference between that theorist and the Epistemicist was precisely that the former draws back from, rather than denies, a view which the Epistemicist takes: the negation belongs

with the attitude, not the content. The ‘indeterminist’ regarded the Epistemicist’s bivalent view of borderline cases (the view of them as determinate in truth-value) not as positively wrong—where that is taken to mean: something she is prepared to *deny*—but as positively unjustified: something which she knows of no sufficient grounds to accept.

In fact, the involvement of an (unexplicated) notion of determinacy was inessential to the view that was being proposed. The claim of determinacy in truth value just is the claim that Bivalence holds in the cases in question. So the heart of the ‘indeterminist’ thesis was just that borderline cases are these: cases where—in an appropriate epistemic sense of the definiteness operator—a target predication is not definitely true and not definitely false and where there is no extant warrant for the assertion of Bivalence. Williamson’s short response contained nothing to threaten the stability of this view.

That said, it merits acknowledgement that ‘indeterminist’ was not the happiest label for the type of position I was trying to outline, and that it may have misled Williamson. For it is hard to hear it without gathering a suggestion of a *semantic* or an *ontological* thesis: of vagueness conceived as involving matters left unresolved not (merely) in an epistemic sense, but in fact, by the very rules of language, or by the World itself. For someone who wants one of those directions made good—and who read my remark quoted above as calling for just that—the direction taken in my earlier discussion, and in this one, will puzzle and disappoint. In any case—save in one crucial detail—it is still no part of the view I have been developing in *this* paper to regard the Epistemicist’s account of borderline cases as ‘positively incorrect’. There is agreement that the root manifestations of vagueness are captured by epistemic categories: bafflement, ignorance, difference of opinion and uncertainty—and that to conceive of the phenomenon in semantic or ontological terms is to take a *proto-theoretical* step which, absent any coherent further development, there is cause to suspect may be a mistake. The ‘crucial detail’ of disagreement—prescinding, of course, from the major conflict over warrant for the principle of Bivalence—is merely over the thesis that borderline cases are known to defy all possibility of knowledgeable opinion. While the coherence of the Quandary view depends on its rejection, Williamson perceives it as a theoretical obligation of his own view to defend it.⁴⁷ But setting that

⁴⁷ I am not myself certain that the Epistemicist does have any obligation to defend anything so strong. Someone who believes that vague expressions have sharp extensions ought to explain, sure, why we don’t actually know what they are nor have any clear conception of how we might find out.

apart, it deserves emphasis that the view of vagueness here defended is consistent with the *correctness* of the Epistemic Conception (and on the other hand, *pari passu*, with agnosticism about whether it even could be correct.) The Quandary view is consistent with the correctness of the Epistemic Conception in just the sense in which the Intuitionist philosophy of mathematics is consistent with the actual correctness of the principle of Bivalence and classical mathematical practice. The basic complaint is not of *mistake*—though the Epistemic Conception may well prove to be committed to collateral mistakes (for instance about the conditions on possible semantic reference: on what it takes for a predicate to stand for a property)—but of *lack of evidence*.

7.2 One—albeit perhaps insufficient—reason to retain the term ‘indeterminist’ for the conception of vagueness defended in my earlier paper was the retention of a definiteness operator and the characterization of borderline cases as ‘not definitely...and not definitely not...’. But I now think *that* was a mistake—and the operator itself at best an idle wheel. My earlier proposal was that *P* is definitely true just if any (what I called) *primary* opinion—any opinion based neither on testimony nor inference, nor held groundlessly—that not-*P* would be ‘cognitively misbegotten’, i.e. some factor would contribute to its formation of a kind which, once known about, would call its reliability into question in any case and could aptly be used to explain the formation of a mistaken opinion. No doubt this proposal could be pressured in detail, but—with the notion of cognitive command recently before us—the guiding idea is plain: the definite truths were to be those disagreements about which would have to involve cognitive shortcoming *tout court*, with no provision for excuses to do with vagueness.

So a claim which is not definitely true and not definitely false ought to be one—I seem to have wanted to suggest—about which ‘neither of a pair of conflicting opinions need be cognitively misbegotten’ (Wright 1995 p. 145). This proposal was intended to capture the idea

... that the phenomenon of permissible disagreement at the margins is of the very essence of vagueness ... the basic phenomenon of vagueness is one of the possibility of faultlessly generated—cognitively un-misbegotten—conflict. (Wright, *ibid.*)

But there would seem to be no clear obligation to conceive of them as unknowable—(though that might be a consequence of the theorist’s best shot at meeting the less extreme explanatory demand.) I suspect that matters proceed differently in Williamson’s thinking: that he regards the impossibility of knowledgeable (positive or negative) opinion about borderline cases as a datum, which would straightforwardly be explained by semantic and ontological conceptions of indeterminacy (could we but explain *them*) and of which he therefore conceives that his own, Bivalence-accepting conception must provide an alternative explanation. I do not think it is a datum.

However we have in effect seen that this will not do. What we learned from the EC-Deduction was that, wherever we have evidential constraint, hence each of the conditionals

$P \rightarrow$ it is feasible to know that P , and

$\neg P \rightarrow$ it is feasible to know that $\neg P$,

the idea of a ‘faultlessly generated’ disagreement rapidly destabilises. For if the disagreement were faultless, it could not be that it was feasible to know either of the protagonists’ opinions to be correct, or there would have to be fault in the generation of the other. And in that case, contraposing on both conditionals, contradiction ensues.

But we know the remedy now: retreat to the double negation and invoke the enhanced principle of ignorance, AG^+ . My proposal should have been not that faultlessly generated disagreements are possible where vague claims are concerned, but that we are in no position to claim that any disagreement about such a claim involves fault. Thus the root phenomenon of vagueness cannot after all, when cautiously characterized, be that of permissible disagreement at the margins; rather it is the possibility of disagreements of which we are in no position to say that they are *impermissible*, in the sense of involving specific shortcomings of epistemic pedigree. We are in no position to say that because, notwithstanding the incoherence of the idea that such a disagreement is actually fault-free, the claim that there are specific shortcomings involved must, in the presence of EC, involve a commitment to their identifiability, at least to the extent of pointing the finger at one disputant or the other. And that is exactly what we have no reason to think we can generally do.

The upshot is that even when ‘definitely’ is interpreted along the epistemic lines I proposed, we should not acquiesce in the characterization of borderline claims as ones which are *neither* definitely true *nor* definitely false.⁴⁸ Rather, they will be claims for which *there is no justification for the thesis that they are* definitely true or definitely false—again, with ‘definitely’ epistemic—nor any justification for the application of Bivalence to them. But now the former point is swallowed by the latter. For in the presence of EC, justification for Bivalence just is justification for the thesis that any statement in the relevant range is knowably—so definitely—true or false. So the definiteness operator is (harmless but) *de trop*.

⁴⁸ I leave it as an exercise for the reader to adapt the EC-Deduction to a proof of this claim.

One more very important qualification. None of this is to suggest that we may give a complete characterization of vagueness along these Spartan lines: that vague statements are just those which give rise to quandary and for which Bivalence is unjustified. That's too Spartan, of course. The view proposed has indeed, after all, no need for the expressive resource of an operator of indeterminacy. But some quandaries—Goldbach's conjecture, for instance—feature nothing recognisable as vagueness; and others—that infidelity is alright provided nobody gets hurt, perhaps—may present quandaries for reasons other than any ingredient vagueness. So the task of a more refined taxonomy remains—the notion of quandary is just a first step.⁴⁹ But if the general tendency of this discussion is right, it is a crucial step.

8. Summary reflections

8.1 To recapitulate the gist of all this. A proposition *P* presents a quandary for a thinker *T* just when the following conditions are met:

- (i) *T* does not know whether or not *P*
- (ii) *T* does not know any way of knowing whether or not *P*
- (iii) *T* does not know that there is any way of knowing whether or not *P*
- (iv) *T* does not know that it is (metaphysically) possible to know whether or not *P*.

The satisfaction of each of these conditions would be entailed by

- (v) *T* knows that it is impossible to know whether or not *P*,

but that condition is excluded by Quandary as we intend it—a quandary is uncertain through and through.

Note that, so characterized, quandaries are relative to thinkers—one person's quandary may be part of another's (presumed) information—and to states of information—a proposition may present a quandary at one time and not at another. There are important classes of example which are acknowledged to present quandaries for all thinkers who take an interest in the matter. Goldbach's conjecture is currently one such case. But for the protagonists in an (intransigent) dispute of incli-

⁴⁹ Relevant initial thoughts, already bruited, are these: it is known—in our present state of information, in the absence of proof—that nobody's opinion about Goldbach is knowledgeable; whereas, on the view proposed, we precisely do not know that a positive or negative verdict about a borderline case of 'x is red' is unknowledgeable. And unlike 'red', predications of 'funny' have no definite cases—they are always contestable.

nation, it will naturally not seem that the target claim presents a quandary; likewise when conflicting verdicts are returned about a borderline case of some vague expression. Yet to a third party, the contested claim in such cases—and hence the question who is right about it—may always reasonably be taken to present a quandary nonetheless.

It should seem relatively uncontroversial to propose that unresolved mathematical conjectures, borderline cases of vague expressions and the foci of disputes of inclination meet the four defining conditions of quandary. To say that much is simply to report on our epistemic situation in relation to the claims in question. It is to say nothing about their metaphysical or semantical status. What is not uncontroversial, of course, is the contention that clause (v) fails—that we do not know that there is no knowing the truth of either of two conflicting verdicts about a borderline case, or either of the two conflicting views in a dispute of inclination. As I have acknowledged, this modesty may go against the grain. But it is imposed if we accept that the disputed statement is subject to EC.⁵⁰ And it is imposed in any case if we are inclined to think that we should be permissive about such disputes—for otherwise we ought to convict both disputants of over-reaching, of unwarranted conviction about an undecidable matter, and they should therefore withdraw. The thought that they are, rather, *entitled* to their respective views has to be the thought that we do not know that they are wrong to take them—do not know that neither of their views is knowledgeable.

I do not expect many immediate converts—at least not from among those who start out convinced that clause (v) should be part of the account of vagueness. But maybe I have done a little to erode that conviction—or at least to bring out other intuitions and theses that it holds hostage. In any case, Epistemicists will abjure the role played by Evidential Constraint in the foregoing discussion. And indeterminists proper will equally abjure the suggestion that the proponents of the Epistemic Conception of vagueness have the matter half right: that indeterminacy *is* an epistemic matter, that borderline cases should be characterized as cases of (a complicated kind of) ignorance. According to the present view, the Epistemic Conception takes us in the right general direction. It goes overboard in its additional (gratuitous and unmotivated) assumption that the principle of Bivalence holds for all statements, including quandary-presenting ones, so that we are constrained to think of e.g. predicate expressions which are prone to give

⁵⁰ See also footnote 41 above.

rise to such statements as denoting—by mechanisms of which no-one has the slightest inkling how to give an account—sharply bounded properties of which we may lack any clear conception.⁵¹ But the general conception of vagueness it involves is otherwise—at least in the round—quite consistent with the present proposal.

I have suggested that the Intuitionists' revisionism is best reconstructed as driven by a mixture of quandary and evidential constraint: the belief that truth in mathematics cannot outrun proof, together with a recognition that unresolved mathematical conjectures can present quandaries in the sense characterized. If this is right, then, my point has been, the revisionary argument will generalise, and classical logic—especially the Law of Excluded Middle and, correlatively, the principle of double negation elimination—should not be accepted (since it has not been recognised to be valid) for any area of discourse exhibiting these two features. The result, I have argued, is that we have the resources for a principled, broadly intuitionistic response to the Sorites paradox. And we can stabilise the contrast between minimal truth aptitude and cognitive command against the Deductions that threatened to subvert it, and which do indeed show that it is unstable in the setting of classical logic. To be sure, we do not thereby quite recover the materials for a coherent *true relativism* as earlier characterized—which involved essential play with the possibility of fault-free disagreement. But an *anti-relativistic* rubric in terms of cognitive command: that it hold a priori of the discourse in question that disagreements within it (save when vagueness is implicated) involve cognitive shortcoming, may once again represent a condition which there is no guarantee that any minimally truth-apt discourse will satisfy. The relativistic thesis, for its part, should accordingly be the denial that there is—for a targeted discourse—any such a priori guarantee (or merely the claim that it is unwarranted to suppose that there is.) Thus the ancient doctrine of relativism, too, now goes epistemic. I do not know if Protagoras would have approved.

8.2 It merits emphasis, finally, that—for all I have argued here—these proposals can be extended no further than to discourses which exhibit the requisite combination of characteristics: quandary-propensity and evidential constraint. Without that combination, no motive has been disclosed for suspension of classical logic⁵²—but classical logic would serve to reinstate the intended conclusions of the two Deductions and

⁵¹ See footnote 6 above.

⁵² But see, however, footnote 38 above.

to obliterate the distinction between the proper conclusion of the Sorites paradox—the denial of its major premiss—and the unpalatable existential. One question I defer for further work is whether the two characteristics co-occur sufficiently extensively to allow the mooted solutions to have the requisite generality.

Two initially encouraging thoughts are these. First, as noted earlier, people's ordinary willingness to think in terms of 'no fact of the matter' in cases of intransigent disputes of inclination is in effect the manifestation of an acceptance of evidential constraint for the relevant discourse. (For if they were comfortable with the idea that such a dispute could in principle concern an undecidable fact, why would they take its intransigence as an indicator that there wasn't one?) I therefore conjecture that whatever exactly it is that we are responding to when we engage in the kind of taxonomy I illustrated right at the beginning with the two 'crude but intuitive' lists, the contents which we are inclined to put in the first list will indeed be cases where we will not want to claim any conception of how the facts could elude appreciation by the most fortunately generated human assessment.

Second, if classical logic is inappropriate, for broadly intuitionistic reasons, for a range of atomic statements, it could hardly be reliable for compounds of them, even if the operations involved in their compounding—quantifiers, tenses, and so on—were such as to enable the construction of statements which are not subject to EC. Thus what the intuitionistic response to the Sorites requires is not that *all* vague sentences be both potentially quandary-presenting and evidentially constrained but only that all *atomic* vague sentences be so. The standard examples of the Sorites in the literature—'red', 'bald', 'heap', 'tall', 'child'—do all work with atomic predicates, and all are, plausibly, evidentially constrained. But that is merely suggestive. If a finally satisfactory intuitionistic philosophy of vagueness is to be possible, we need an insight to connect basic vague expressions and evidential constraint. The notions of observationality, and of response-dependence, would provide two obvious foci for the search. For now, however—in a contemporary context in which a few theorists of vagueness have argued against its prospects but most have simply paid no serious heed to the idea at all—it will be enough to have conveyed (if I have) something of the general shape which a stable intuitionistic philosophy of vagueness might assume.⁵³

⁵³ Versions of the material on revisionism were presented at colloquia at the University of Bologna, the City University of New York Graduate Center, and at Rutgers University in Autumn 1998. I was fortunate enough to have the opportunity to present a discussion of all three problems at two

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References

- Blackburn, Simon 1984: *Spreading the Word*. Oxford: Clarendon Press.
———1998: *Ruling Passions*. Oxford: Clarendon Press.
Campbell, R. 1974: 'The Sorites Paradox'. *Philosophical Studies* 26, pp. 175–91.
Cargile, J. 1969: 'The Sorites Paradox'. *British Journal for the Philosophy of Science* 20, pp. 193–202.
———1979 *Paradoxes*. Cambridge: Cambridge University Press.
Chambers, Timothy 1998: 'On Vagueness, Sorites, and Putnam's "Intuitionistic Strategy"'. *The Monist* 81, pp. 343–48.
Fine, Kit 1975: 'Vagueness, Truth and Logic'. *Synthese* 30, pp. 265–300.
Fitch, Frederic B. 1963: 'A Logical Analysis of Some Value Concepts'. *The Journal of Symbolic Logic* 28, pp. 135–42.
Gibbard, Alan 1990: *Wise Choices, Apt Feelings*, Cambridge, Mass: Harvard University Press.
Hale, Bob 1986: 'The Compleat Projectivist'. *The Philosophical Quarterly* 36, 65–84.

seminars at Ohio State University in December of that year, and to have a precursor of the present draft discussed at the Language and Mind seminar at NYU in April 1999, where Stephen Schiffer's commentary resulted in a number of improvements. The NYU draft also provided the basis for three helpful informal seminars at Glasgow University in May 1999. More recently, I took the opportunity to present the material on the Sorites at an *Arché* Workshop on Vagueness which, with the sponsorship of the British Academy, has held at St Andrews in June 2000. I am extremely grateful to the discussants on all these occasions, and in addition to John Broome, Patrick Greenough, Richard Heck, Fraser MacBride, Sven Rosenkranz, Mark Sainsbury, Joe Salerno, Tim Williamson and a referee for *Mind* for valuable comments and discussion. Almost all the research for the paper has been conducted during my tenure of a Leverhulme Research Professorship; I gratefully acknowledge the support of the Leverhulme Trust.

- 1992: 'Can There Be a Logic of Attitudes?' in Haldane, John and Wright, Crispin (eds.) *Reality, Representation and Projection*. Oxford: Oxford University Press, pp. 337–63.
- forthcoming: 'Can arboreal knotwork help Blackburn out of Frege's abyss?' in a *Philosophy and Phenomenological Research* Book Symposium on Blackburn's (1998).
- Harman, Gilbert and Thomson, Judith Jarvis 1996: *Moral Relativism and Moral Objectivity*. Oxford: Basil Blackwell.
- and others 1998: Book Symposium on Harman and Thomson (1996) in *Philosophy and Phenomenological Research* LVIII, pp. 161–213.
- Horwich, Paul 1998: *Truth*. Oxford: Clarendon Press (second edition).
- Putnam, Hilary 1983: 'Vagueness and Alternative Logic' in his *Realism and Reason*. Cambridge: Cambridge University Press, pp. 271–86.
- Read, Stephen and Wright, Crispin 1985: 'Hairier than Putnam Thought'. *Analysis* 45, pp. 56–8.
- Salerno, Joseph 2000: 'Revising the Logic of Logical Revision'. *Philosophical Studies* 99, pp. 211–227.
- Shapiro, Stewart and Taschek, William 1996: 'Intuitionism, Pluralism and Cognitive Command'. *Journal of Philosophy* 93, pp. 74–88.
- Sorensen, Roy 1998: *Blindspots*. Oxford: Oxford University Press.
- Williamson, Timothy 1992: 'Vagueness and Ignorance'. *Proceedings of the Aristotelian Society, Supp. Vol.* 66, pp. 145–62.
- 1994: *Vagueness*, London and New York: Routledge.
- 1996a: 'Putnam on the Sorites Paradox'. *Philosophical Papers* 25, pp. 47–56.
- 1996b: 'Wright on the Epistemic Conception of Vagueness'. *Analysis* 56, pp. 39–45.
- Wright, Crispin 1992: *Truth and Objectivity*, Cambridge, Mass.: Harvard University Press.
- 1993: 'Anti-realism and Revisionism', in his *Realism, Meaning and Truth*, Oxford: Basil Blackwell (second edition), pp. 433–57.
- 1995: 'The Epistemic Conception of Vagueness'. *The Southern Journal of Philosophy*, XXXIII, special supplementary number on Vagueness edited by Terence Horgan, pp. 133–59.
- 1998: 'Truth: A Traditional Debate Reviewed'. *Canadian Journal of Philosophy* 24, supplementary volume on Pragmatism, guest edited by Cheryl Misak, pp. 31–74. Reprinted in Simon Blackburn and Keith Simmons (eds.) *Truth*, Oxford: Clarendon Press 1999, pp. 203–38.

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in Michael P. Lynch, ed. *The Nature of Truth: From the Classic to the
Contemporary*. Cambridge, Mass.: MIT Press.