Is 'What is Time?' a Good Question to Ask?

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Philosophers typically tend to presume that time is something like a continuum of instants, or a succession of durationless 'nows'. This presumption faces some serious difficulties.

It is unclear how one can possibly build up to time, as continuous, from durationless instants. It is very like the notion of building up a line from dimensionless points. There are certain contexts in which it might do no harm to think of a line as 'composed' of points—for example, in certain rarefied contexts of theoretical geometry; or perhaps, if one was trying to explain to a student how to measure a line; or, more straightforwardly (with the points now transparently *not* dimensionless), if one was wishing to paint a line 'Monet-style' or 'Seurat-style'. But it is absurd to surmise that a collectivity, however large, of dimensionless points could actually result in something with dimension.[1]

There seems then to be something very dubious about the idea of time as *composed* of instants.

Furthermore, 'now' is a paradigmatically *indexical* and *context-relative* expression: when specified somewhat more closely, it can mean today, this year, the modern age, this instant (i.e. 'right away'); etc. It isn't any kind of temporal unit whatsoever—and hence time can't be a sequence of those 'units'.[2] Much the same is I think true, if less obviously, of 'instant'. Compare, 'Come here this instant!' It

[1] This background theme of the present paper, I treat in much greater detail in my 'Slicing time' (paper presented at 'Orders of Ordinary Action', Manchester Metro. University, July 9–11 2001) and my 'Neither languages nor linguistic competences are usefully said to be "infinitary"' (jt. with T. DeMarco, forthcoming). One name for that theme might be: the '*incommensurability*' of finitude and infinitude.

[2] Michael Dummett ('Is time a continuum of instants?', *Philosophy* **75** (2000), 497–515) recognizes the indexicality of 'Now' (pp. 508–9), but fails to draw the requisite consequences, consequences writ large in Wittgenstein (and in Ethnomethodology—see my 'Slicing Time' (op. cit.)). In particular, he still, rather bizarrely, tends to treat time as *composed of units,* as we shall see in detail below.

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would seem deeply misleading to think of this command as congenitally vague—or, oppositely, as implicitly invoking a quasi-scientific unit of time. Rather, it is surely an indexical, context-relative etc. utterance.

Michael Dummett[3] has recently argued powerfully in these pages to fairly similar effect: he has criticized severely the 'classical' model of time, a model he notes is strongly present in Hume and after, *and* which he thinks has deep 'Realist' pretensions (Actually, he speaks of a *super-realist* metaphysics here (p. 497)). That is, the notion of time as composed of durationless instants:

(1) presumes that there is always a completely precise answer to the question, 'When did *x* happen?', even if such an answer is entirely and in principle beyond our cognitive powers. Furthermore, it:
(2) invites the postulation of seemingly 'conceptually-impossible' scenarios.

Dummett proposes an alternative (more or less 'Anti-Realist', or at least Anti-'super-realist') model of time. We shall get to its details in the course of the following discussion. But I want to begin by remarking that we need to be very careful, from the beginning, not to buy into latent nonsense here, if we are inclined to agree with Dummett's (terms of) criticism—if we are inclined, that is, to agree that there seems something abhorrent or nonsensical about the classical model. I will take (1) and (2) in turn, and we will see that Dummett's manner of dealing with them leaves his own incipient philosophy of time in an unstable and potentially nonsensical condition.

(1) If we are inclined not to agree that a 'completely precise' answer can be given (by God) to some (or any) 'When did *x* happen?' questions, we should not rush to the conclusion that this is because *x* happened, for instance, *at a vague time*. Rather than rushing to give an alternative answer to the 'Realist''s question we should instead ask whether any sense has yet been attached to what the 'Realist' asks and then asserts (for others to deny).

The Realist seems in the grip of an attractive picture. A picture, we might say, of the universe as everywhere and everywhen just as it is, and not another way.

But that now sounds tautological. Can the picture be made any clearer than that, and controversial enough for someone actually to disagree with? I am not sure it can. But the point is: Dummett does not stop to find out. He instead assumes that the Realist picture is intelligible and contentious, and presses immediately to provide an

[3] Ibid.

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alternative picture, a picture he thinks less 'implausible', more 'parsimonious', or something like that. It is hard to know how one can actually assemble *criteria* for judging between these pictures, for saying that there is an alternative to Realism that is 'more satisfactory' (p. 505), or 'better' (p. 505). It is unclear whether Dummett is using a philosophical *method,* one might say. Unless he is simply 'doing metaphysics'. But didn't we learn anything from Wittgenstein? Can we just presume that the question 'What is time?' is well-defined, or that the question 'When did *x* happen?' must always have some kind of definite answer, even if that answer attributes indefiniteness to *x*?

But am I being unfair to Dummett? Doesn't he actually understand at least somewhat a central Wittgensteinian objection to metaphysical Realism, namely that it is not a coherent picture at all? That it yields various conceptual impossibilities (see e.g. p. 503, p. 505)? This is where (2) comes in:

(2) We should be alarmed that Dummett seems to have no problem describing *exactly what the 'conceptual impossibilities' are* that he claims follow from 'Realism' about time. Dummett claims that there is something unintelligible about the 'Realist' picture of time, that it involves the postulation of phenomena that ought 'to be rejected as impossible on pure conceptual grounds' (p. 505); but he acts and talks as if he *understands* it perfectly well.

Again, the worry here is that Dummett goes far too quickly. He tends to very quickly—without giving any philosophical (let alone sociological, or linguistic, etc.) justification—cite certain features of 'our concepts' (see e.g. p. 499), and just as quickly wheels them in to attack 'Realism' about time. Take the following example (from p. 503):

> '[Consider] a pair of objects which, throughout a certain interval, were exactly 2cm apart, save at one particular instant in that interval, when they were 4cm apart. *Our conception of physical quantities is plainly such that this supposition makes no sense*. Yet the classical model allows it a sense; according to it, it is barred, if it is barred, only by the laws of physics, and not *by conceptual necessity*. The classical model supplies descriptions for states of affairs which, *being conceptually impossible*, should admit no description.' (emphases mine)[4]

[4] Compare also the passage immediately preceding this one, on pp. 502–3:

> 'Consider intensity of illumination. // ... The ['classical', Realist] model ... represents ... abrupt change as being one or other of two physically distinct events: one in which the illumination vanishes *at* the instant of

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This example does indeed seem to bring out something 'unsatisfactory' about the picture of time as a continuum of *durationless* instants. (It is not clear that anything at all has genuinely been pictured, if we are asked to imagine something being somewhere only for an instant that has no *duration*.) I have already suggested that we need to go right back to the 'start' of that picture, and ask ourselves how we could ever have imagined in the first place that you can 'develop' continuity, time, change, out of changeless points alone. I don't see how the picture gets off the ground; it's as hopeless as the fantasy of getting perception out of empiricist sense-data. But it seems incoherent to let the picture get off the grounds, and *then* counterexample it, if the way that the counterexample you describe supposedly proves your point is that ... the counterexample has not described anything! Why shouldn't the Realist respond to Dummett simply thus: 'Given that it is obvious that you and I both understand the plain English used in your example, it is a self-refuting "counterexample".' One has to have a way of 'dialoguing' with the Realist that does not *first accept* his terms and *then* (as he will not unreasonably see it) beg the question against him. If one is reducing one's opponent to absurdity, one must not *accept* his terms; one should at most entertain them, and make perspicuous that they were not terms anyone could ever intelligibly accept, and then use (as opposed to mention) them in sentences of one's own.

If Dummett wants to employ the 'scenario' he describes, he should either:

(a) endeavour to get it to be 'self-deconstructing', from the start, merely a rhetorical device, a piece of nonsense to bring out the

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change, the surface having a positive illumination at every instant *before* the change; and the other in which the surface continues to have a positive illumination at the instant of change, but 0 illumination for every instant in some interval *after* that instant. / / Plainly, there are no two such distinct physical possibilities: nothing could determine whether the surface had zero or positive illumination at the precise instant of change, and we *cannot conceive* of there being any genuine distinction between the two cases. Here the classical model provides a means of differentiating between two physically different states of affairs which cannot possibly correspond to any distinction in physical reality.' (Final italics added.)

The question is whether we are to take seriously, 'literally', the portions of the above which are italicised. If we do not take seriously the expression 'cannot conceive', then Dummett surely begs the question against the 'classical-ist'. His only means of avoiding such question-begging is his resort to what is 'conceptually impossible'. But that resort raises precisely the problems I am addressing in (2).

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latent nonsense of 'Realism'. (Otherwise there will clearly be a latent contradiction in what he has done: *describing* something (e.g. take his example involving 'a pair of objects ... 2cm apart save for at one particular instant...') that he precisely wants to argue *is indescribable* (at least, 'for us').)

Or, better still:

(b) he could actually take the risk of allowing us to think for ourselves about the topic, to think about these difficult matters in all their complexity. What do I mean? I am thinking of the striking difference between the examples and scenarios which Dummett employs, and those which are invoked in Wittgenstein's texts. Typically, the latter are more 'open-textured'. We have in a way to decide for ourselves whether or not a scenario has actually been depicted at all, in most of Wittgenstein's 'examples'. Take for example the builders,[5] the woodsellers,[6] 'pain-patches' and pain in stones[7] etc.; do we really know what to say (in advance of thinking them through in a potentially almost endless dialogue) about any of these? Or do they rather engage with our profound temptations to mire ourselves in nonsense? (I will return to this matter later in this paper.)

Anti-Realist (e.g. Relativist) interpretations of Wittgenstein tend to short-circuit all that is most profound and potentially therapeutic in his thought. When one encounters a teasing 'example' in Wittgenstein, one will perhaps inevitably at first work with the assumption that it makes sense, that something possible in another culture or at least in a world with different natural-scientific 'laws' is being described. But Wittgenstein's writing then tends to bring out features of the 'scenarios' he has apparently described which induce those 'scenarios' to collapse in on themselves. One way of expressing what Wittgenstein's examples tend to show is that we are

[5] About 'whom', for example, Rush Rhees has written an entire book. Imagine by contrast trying to write a book about 'removable discontinuities', at least as described by Dummett on p. 504.

[6] For discussion of the woodsellers, the would-be 'mathematical strangers', in Wittgenstein's *Remarks on the Philosophy of Mathematics*, discussion of just the kind I am recommending in contrary spirit to Dummett, consult the essays by Crary and Cerbone in Crary and Read (eds), *The New Wittgenstein* (London: Routledge, 2000). (See also J. Conant's 'The search for logically alien thought: Descartes, Kant, Frege and the *Tractatus*', in *Philosophical Topics* **20** (1991), pp. 115–180.)

[7] See *Philosophical Investigations, Zettel*, etc.

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deluded if we think of what can be thought, of conceptual possibility, on anything at all like the model of physical possibility. 'Conceptual possibilities' are not, as they seem to be for Dummett, 'impossible possibilities'[8]—they are simply expressions which delude us into thinking we know how to use them. Whereas we are far from having found a use for them *at all*.

But one could equally express the tentative, situation-relative, confusion-relative 'insights' that working through Wittgenstein's 'examples' yields in ways quite different from the above, even in ways apparently contradictory to it. For the thing is, not to establish any philosophical thesis; the important thing is to resolve the contradictory impulses one already has, oneself, probably latently, in relation to the seemingly-underlying 'questions' (e.g. 'What is language?', in the case of the builders; 'Is there only one possible 'system' of logic, or of arithmetic, or are there several?', in the case of the woodsellers; and so on). The important thing is to face honestly the difficulty attending any wish we might have to speak of 'something' that seems conceptually impossible.[9]

Dummett, by contrast, knows exactly the answer he wants us to reach, the philosophical thesis he wants us to enunciate along with him; the devices he uses to get there do not essentially interest him, and that is perhaps how he misses their incoherency—how he misses

[8] Compare para. 500 of *Philosophical Investigations*: 'When a sentence is called senseless, it is not as it were its sense that is senseless.'

[9] This means that we need to be very suspicious of moments in Dummett such as the following (p. 505). 'How can we arrive at a more satisfactory model [than the 'classical' model] of time...? Such a model should render conceptually abhorrent discontinuities impossible to describe, and eliminate any distinction between diverse descriptions of abrupt changes.' So: the 'conceptually "abhorrent"' (or 'impossible') must be rendered 'impossible to describe'; yet we have already seen Dummett laying out for us—describing—examples of precisely such allegedly impossible discontinuous changes. We are told that there must not be allowed to be any 'distinctions' between 'diverse descriptions' of 'abrupt [discontinuous] changes'; yet Dummett himself appears precisely to have distinguished such descriptions, *so as to have an argument to make against the classical model*.

'Anti-Realism', the class of views outlined and defended by Dummett on p. 510f., escapes from the absurdities of 'Realism'—the imagining of conceptual impossibilities—only by imagining ... those very conceptual impossibilities (so as to state that they are are impossible)! Anti-Realism is condemned by its own procedure. It requires us to 'leave our skins' so as to have an *argument* for why it is 'impossible' for us ... to 'leave our skins', as Realism impels us to do.

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the respects in which, evidently, he himself does not have a good grip on the words he is using, the respects in which he is only mirroring the absurdities of the 'Realist, not in any way 'correcting' or transcending them, not perspicuously bringing them out. In short: It is just no good to state just what it is that one's opponents impossibly conceptualize. (Have we learned nothing from Frege's wrestlings with this? Nor from the central difficulty of the *Tractatus*?[10])

My view, then, is that we should ask ourselves with the utmost seriousness whether it is wise to think as Dummett does. He replies more or less in the negative to the question, 'Is time a continuum of instants?'[11] I am pretty sympathetic. But he seems to think that this negative reply entails giving an alternative theoretical account; he nowhere canvasses the possibility that there is something amiss with the *question,* with what we want when we raise such questions in the first place. In other words, he thinks that he still has to reply to the question, 'What (then) is time?' He canvasses a few possibilities, and appears most sympathetic to the anti-classical model of time which he terms 'constructive'. Here are his concluding remarks on this alternative model:

> 'The constructive model does not represent time as composed of durationless instants corresponding to determinate real numbers, as the classical model does, nor of small constitutive intervals, as the unmodified fuzzy realist model does. Rather ... it represents time as a continuum which we can dissect into intervals whose end-points are the initiation and termination of physical processes. We can determine the end-points of such intervals as themselves much smaller intervals, these being our approximations to the instants at which they occurred. Such instants are indeed representable by real numbers, and it is on them that are defined the functions giving the magnitudes of other quantities at different

[10] On these questions, see Cora Diamond's *The Realistic Spirit* (Cambridge, MA: MIT, 1991). See also Joan Weiner's and Tom Ricketts's work; and n. 6 & n. 8, above. My suggestion, which of course I cannot substantiate here, is that the work of these commentators/philosophers shows that it appears Dummett has not learnt the most important 'metaphilosophical' lessons—for example, those tied to the concept of 'elucidation'—of the writings not only of (early) Wittgenstein, but even of Frege.

[11] 'According to the classical model, time is composed of durationless instants. According to the fuzzy realist model, in its unmodified form, it is composed of intervals all of the same length.' (p. 509) Dummett himself favours a modified version of fuzzy realism—see below for more detail.

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> times; in this respect all is as in the classical model, and we may [in this sense] say that time is composed of such instants. But the constructive model differs from the classical one in that these instants are not precisely located…' (pp. 514–5)

Now, this 'constructivism' is explicitly a *variant* of what Dummett earlier in his paper termed 'fuzzy realism'. (Both views look rather like versions of what is I think typically and more generally termed '*Anti*-Realism'.) 'Fuzzy realism' constitutes a particular counter-claim to Realism's thought that physical quantities always have definite even in in principle unknowable magnitudes. The 'fuzzy realist' counter-claim is that physical quantities may have indeterminate magnitudes, but that they *really do* have those magnitudes, and no others—that their *degree* of indeterminacy may be perfectly 'precise'.

This can be (and sometimes is) re-expressed as follows: Realists hold that all objects are precise. Whereas some 'Anti-Realists' (in this case, for example, 'Fuzzy Realists') hold that at least some objects are vague (albeit, typically, precisely vague'). Thus while Realists say, as Dummett intimates (on p. 499), that '*We* cannot determine [such and such a] magnitude more closely than to within some approximation: but in reality, it is completely precise', Anti-Realists tend not to question what this could mean, but simply to negate it, by means of counterposing a picture along the following lines: '*In reality,* this magnitude is imprecise.' And 'in reality' in these sentences is not supposed to mean simply, 'Honestly, it is', but rather, 'Reality, "out there", is literally like this' (whatever *that* means…).[12]

This all seems to me very peculiar. It seems to involve a predication to the object of what is ordinarily perspicuously understood to

[12] Here is Dummett making exactly this move, this mistake, on p. 505: '[A good model of time and of other physical quantities] will represent each physical quantity as fully describable by specifying an interval within which its magnitude lies. The interval will not merely represent the best approximation that we can achieve by measuring it: it will constitute the magnitude of the quantity *as it is in reality*.' To ask what time is composed of as Dummett continues to do is like asking what a ruler is composed of. (Cf. Wittgenstein on the standard metre (*Philosophical Investigations* para. 50), and on vagueness (paras 68–88). For strong criticism (amenable to my own views) of Dummett (and Fine) on vagueness as an issue in the philosophy of language, see David Houghton's 'Vagueness, stipulation and context' (*UEA Papers in Philosophy* New Series **11** (2000), 1–24, especially pp. 12–13).)

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be a feature of the mode of presentation. *What are we doing,* when we speak of vague *objects* (or for that matter of 'precise objects')?[13]

Note further that if one argues that one of these possibilities is incoherent, one should *for that reason* say the same of the other. Thus 'Anti-Realists' should beware of suggesting that there couldn't be any such thing as a 'precise object, such that all objects 'are' vague. Because this will have the immediate consequence that we can make no sense of the concept of a 'vague object' either. If there can't be 'precise objects', then there are simply objects (As seems to me the case. 'Vague object' only makes sense if there is a genuine contrast class.).

The same applies the other way around, and this is very important: Some Realists are rather inclined to hold that the very concept of a 'vague object' is absurd, laughable. (They are perhaps more dismissive of their opponents, typically, than is true contrariwise.) But if 'vague object' is oxymoronic, then so is 'precise object'. Unless 'vague objects' are retained in play as conceptual possibilities, then the field is cleared of all but (plain) objects, objects as they were before metaphysicians got their hands on them. (In fact, this point creates a dangerous incentive for each side in the Realism vs. Anti-realism debate to avoid appearing to win the debate too decisively. For if they reduce their opponent to absurdity, they reduce themselves to absurdity at the same time!)

Probably to avoid this risk, participants in these debates typically try to speak as if the debate between them is a genuine question of a matter of fact; as though the question is not whether their opponents' view is *coherent,* but about whether their opponents' view is *false* (and their own, true). The difficulty, as hinted earlier, is that it is hard to come up with arguments—with criteria—for the falsity or truth of such abstract claims as we are here dealing with. Dummett and his opponents do not wish to fall victim to properly scientific refutation or ridicule. But they want to have something to say against each other more than just 'I don't like your picture'. So they tend periodically to fall into making 'logical' or 'conceptual' claims against one another after all—thus leaving themselves open again to the kind of meta-criticism I have just essayed, in the paragraph above, and in consideration of point (2), earlier. I have already, then,

[13] Here is something we could be doing: we could be contrasting (say) objects like clouds with objects like rocks or aeroplanes. I think it will be evident to the reader that, while there is a genuine contrast involved there, it is *not* that involved in the philosophical debate at issue (e.g. in Dummett).

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shown some of these turns of the dialectic in operation in Dummett's paper, and the confusions associated with them. (More will follow.) It becomes increasingly hard to see where Dummett can go so as to have anything to say which does not fall into one or other of these traps.

But before going on, I want to remark that I find it interesting that Dummett should allow (pp. 505–6) that his own view might well be called a form of *Realism*. For, as set out above, though Dummett does not accept unalloyed 'fuzzy realism', he does accept a modified version of it (p. 508f.), which he then calls 'constructivism' (in this case, constructivism about time). This suggests to me something I shall increasingly argue for in what follows: That 'Anti-Realism' is invariably *a form of Realism,* just an odd, subtly inconsistent form. Anti-Realism keeps the fundamental metaphysical picture of Realism intact; it does not radically alter but only slightly broadens the structure of options, of categories, that are open to one. I suspect that deep down, rather than merely thinking of itself as the most coherent and helpful available way of talking metaphysically, Anti-Realism still thinks that there is a Reality ... settling whether Realism or Anti-Realism is correct! We might say that 'Anti-Realism' is never anti-Realist enough, or not consistently anti-Realist. It inevitably tends, as a matter of rhetoric, toward regarding its dispute with Realism as one *about a matter of fact*. Among other things, this enables it to be philosophically 'respectable'; it does not seriously challenge well-established philosophical 'games', it does not raise questions about philosophy itself, or even about philosophical method. It appears to be in the game of stating 'how things are', when it falls back from its incoherent criticisms of Realism as nonsensical, incoherent, into a criticism of Realism as 'false'.

If I am right, Anti-Realism is essentially conservative. Thus it is perhaps no surprise that Dummett tries to win respectability and deflect Realist opprobrium by half-calling his own view a kind of Realism. For Realists *should* acknowledge Dummett as, on the points that really count, one of their own. The disagreement between classical Realism and Dummettian Realism (it perhaps matters less now whether we include the prefix 'Anti-' or not) is like the disagreement between the Conservatives and New Labour; most of the non-rhetorical differences between the two sides are within their accountants' margins of error.

But, as yet, some of the above may appear to remain mere assertion. I need to do a little more philosophical work, concerning the work that 'the philosophy of time' (allegedly) does, concerning its

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'cash value', in order to convince anyone sceptical of my claims, and so as to lead up to my conclusion—which concerns the degree to which the activity that Dummett is engaged in is anything different from traditional (more or less pre-Kantian, certainly pre-Wittgensteinian) metaphysics.

Perhaps Dummett and a Realist opponent of his would *jointly* object to my arguments, at a high level of generality, roughly as follows: 'You are trying to evacuate the philosophy of time of content and significance. But the questions we are trying to answer are important. You have still offered no good reason for *us* to think that there is not an issue between us, between Dummett and his target and critic.'

After all this discussion, it is possible that I am not alone in wondering, rather by contrast: 'What is the point of all this Realist and Anti-Realist contestation about time? What could really *turn on* the answer to the questions that Dummett is considering?' If *these* questions are in the reader's mind at all, then I am evidently very sympathetic. For what *is* the 'cash value' of disputes between 'Realist' and 'Anti-Realist' hereabouts? Does physics need these pictures, these metaphors? Possibly they might help, they might provide ways in which physicists might want to think about time; but it is hardly as if physicists are going to let themselves be instructed by philosophers as to how they must think about time.[14] If the point is to offer potentially helpful images of time to physicists, then at the very least the tone of the debate between Dummett and his opponent should change rather. In fact, it would become rather unclear whether there was really a *disagreement* between the two, at all. If I compose one piece of music, and you compose a discordantly different one, are we *disagreeing*?

Is it perhaps rather psychology, or sociology—human science as opposed to natural science—which needs help from the philosopher in understanding time? Is it time as lived / as experienced which is actually at issue between Dummett and his opponents? This seems even less likely—for, unlike many in the 'Continental' tradition (e.g. Bergson, Heidegger, Schutz), Anglo-American philosophers seem extremely uninterested in the 'secondary' question of how time is lived. Even most 'Anti-Realists', who might have been expected to have been gripped by the phenomenon of time-for-humans, actually

[14] Arguably, after Einstein, physicists tend rather better than others (psychologists, for example) to appreciate that a certain kind of pursuit of the essence of time is without point. It would take me too far afield in the present context, to justify or elaborate on this claim; but see n. 20 (below), and my 'Slicing Time' (op. cit.).

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show little ostensible interest in it. (Though many human scientists, practitioners of anthropology, sociology, etc., who work on 'time' can I think be reasonably described as 'Anti-Realistic', as implicitly more or less 'Dummettian'.[15])

Are there questions lying 'behind' questions like 'Is time a continuum of instants?', questions which *do* have a more genuine or weighty interest, or use? For example, is one perhaps really trying to understand *how change is possible,* when one asks questions like Dummett's? Well, if one is, one is unfortunately pursuing an entirely unproductive route of approach to that question (a metaphysical question, a question whose level of generality is such that it is admittedly unlikely to be a productive question to ask in the first place). For the point is that Dummett's 'theory of time' does not actually help us understand how change is possible in the slightest, being itself *entirely parasitic upon the phenomenon / phenomena of change*. The 'grammar' of change—in fact, the 'grammar' of temporality in general—is already presupposed by Dummett's apparatus (in the 'modified fuzzy realist model' (p. 509), which is essentially his own preferred model, the 'constructivist' model): the apparatus of constitutive intervals (of time) of varying lengths, etc. These units, of which time is 'composed', already presuppose *the passage of time*. Someone might want to regard this as an improvement over the 'classical' model of time, wherein it seems impossible to constitute time at all, given that all we have in that model are durationless units.[16] But the improvement is pretty fishily bought—rather than have no understanding of time result from one's model because one has quite deprived oneself of time (of duration, of continuousness), one has an understanding of time ... because one has presupposed time, has presupposed what time is!

[15] I cannot justify this claim here, but the interested reader might care to look, with a critical eye, at the work on time of major contemporary sociologists such as Eviatar Zerubavel or Anthony Giddens.

[16] Especially, one might find an improvement over the 'classical' model, in this remark of Dummett's: 'it must be the sequence of events that gives substance to the instantaneous states, not the instantaneous states that together give substance to the sequence.' (p. 501) My difficulty with this is only: it makes it sound too much as if there remains a foundation or 'reduction basis' for time, only not the one that we expected. The 'reduction basis' turns out to be not instants, but sequences of events (or temporal intervals). I have already intimated that this is *at best* charitably construed as a presentation of time as we always already grasp it in our practices and experiences; *not* as a theorization, not as an account of what time 'really' is.

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Dummett's own 'model' appears to me, then, not actually to offer any assistance at all to anyone, be they scientist, layperson, or even philosopher, in understanding what time 'really' is, or in understanding apparently related matters, like 'how change is possible'. Compare the following remark, from p. 509 of Dummett's text: 'Time is the measure of change: its existence simply consists of there being functions giving the magnitudes of other quantities at different *times*. So time is given as the totality of possible arguments of such functions: instants on the classical model, constitutive *intervals* on the fuzzy realist one. The arguments of such functions are the basic temporal units: it is of them that time is composed.' (Emphases mine) I fail to see how this helps anyone at all, unless perhaps it be as an attempted 'reminder'. At best, it re-states (pretty unperspicuously) what we all already knew. Dummett still shares the fatal myth of the classical Realist: to think that it is helpful or True to state that time is *composed* of anything at all.[17]

Except perhaps: a pure metaphysician might be 'helped' by Dummett. Someone who thinks there is simply an autonomous subject: 'The theory/metaphysics of time', orthogonal to Physics, or to Psychology, or to Post-Wittgensteinian philosophy.

In the end, it appears that Dummett may in fact be happy to self-identify as such a metaphysician. His paper ends as follows:

> 'A [charitable] realist will say that [Dummett's] is a good description of our imperfect methods of determining instants and magnitudes, but that we must believe that the limits we cannot attain exist in reality, though known only to God. The constructivist asks why we should believe this: he does not think that reality contains, or that God creates, anything of which His rational creatures cannot in principle become aware.' (p. 515)

I don't want to read *too* much into this; perhaps it is just a cute rhetorical flourish. But the reading of it that I am inclined to give does fit the line of argument which I have pursued in this paper. Dummett is, in the end, still I think playing a quasi-medieval game: he is still trying to answer the allegedly 'straightforward' question, 'What *is* time?'

[17] Cf. also here Dummett's most succinct statement of the 'fuzzy realist' model with which he has a degree of sympathy: 'Time, on this model, is not composed of durationless instants, densely ordered, but of overlapping intervals having some temporal extension.' (p. 506) Plainly, Dummett is here interested in answering just the same question as the classical 'Realist', but he has not showed that that question makes sense; nor has he showed that his preferred class of plausible answers to it do not presuppose 'the grammar of time' through and through.

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The Realist says that the World contains more than we, constrained as we are by our alleged 'finitude', can understand or know. But the Realist thinks that we can look beyond those 'limits', in philosophy (metaphysics), to say something about what there is beyond what we can actually understand or know. The Anti-Realist (e.g. the 'constructivist') says that the world contains nothing more than we find, within our 'limits'. But the Anti-Realist thinks that we can look beyond those 'limits', in philosophy (metaphysics), to say something about what there *isn't* beyond what we can actually understand or know.

When one puts it like that, isn't it obvious how very much the two 'combatants' share, how barely differentiable are their positions? Anti-Realism does not really question the Realist picture of things *at all*—it just denies its truth. Or, to put it much less grandly, 'Realists' and 'Anti-Realists' just differ about how words like 'world' should be used. The difference between them seems, from the point of view of one who is not attracted by their games, to be above all *a* merely *semantic difference*.

We who do not see a need any more to actually do metaphysics are not content to let the Realist picture stand in the first place. We abandon the picture of limits,[18] the picture parasitic upon the picture of the Realist notion of the world beyond those 'limits'. Again, 'Anti-Realism' does *not* in the end question those pictures.

That is why I said, earlier, that it is reasonable to characterize 'Anti-Realism' as a (deviant) form of 'Realism'. Depending on one's taste, one might say that it is a poor man's Realism; or that it is Realism groping its way towards a tenable alternative. But, either way, anyone in search of a genuine alternative to metaphysics, to Realism, needs to look considerably further afield.

Even such a one, finding perhaps what they were looking for much more in Wittgenstein (and perhaps also in Cavell, Diamond,

[18] Or at least we radically reinterpret it, as Wittgenstein did *throughout* his work. i.e. Virtually whenever Wittgenstein uses words such as 'limits', the word needs to be understood in a 'transitional', and in fact almost Pickwickian sense—one is not limited *from* anything (One needs not to think about language, and not to 'intuit', but to *look,* with care, to see that Wittgenstein is using the word in this way, whether in the *Tractatus* or the *Philosophical Investigations*.). Thus also, Wittgenstein's 'quietism'; one is not quiet *about* anything. There is nothing—nothing that amounts to anything—that is *passed over.* (For argument in support of these several claims, see Diamond's, Cerbone's, and my papers in Crary and Read (op. cit.), and also my 'Meaningful Consequences' (joint with J. Guetti, *Phil. Forum* 30:4 (1999), 289–315).

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Conant, McDowell, and recent Putnam[19]) than in Dummett, might still ask whether I really mean to deny that 'constructivism' is any progress at all away from / beyond Realism. Doesn't constructivism help one to give up 'philosophical theism'? Isn't it a partial cure, a way-station on the road to abandoning a God who isn't *required as* 'super-realists' (Dummett, p. 497) and Lewis and Davidson and Chalmers and Colin McGinn and a thousand others throughout Anglo-American philosophy still arguably require God?[20]

Maybe so. But it seems just as likely to me that 'Anti-Realism' simply drives the illness deeper underground. That it is a neurotic condition resulting from repression of the illness's starker symptoms. 'Anti-Realism' can appear to have more philosophical acuity about it than 'Realism'—I have suggested, that this is only because it rather hides its *own* 'Realism', partly through *systematically failing to choose whether its criticism of standard 'Realism' is that it is false or that it is nonsensical*. Where 'Anti-Realism' is in my opinion potentially most acute, where it appears to have something to say beyond the alleged 'implausibility' or 'unhelpfulness' of 'classical' Realism, is where it looks to characterize 'Realism' as nonsensical,

[19] And with these figures on board, it is perhaps worth making a claim about how the Wittgensteinian approach which I am commending wishes, in the end, critically to characterize Realism and Anti-Realism: neither is *realistic* enough (using this word now in Diamond's sense, after Wittgenstein, in her *The Realistic Spirit* (Cambridge, MA: MIT, 1991). Neither is prepared to allow the (reality of) time, or number, etc., to simply *be*: both think that Philosophy has to pronounce on what they 'Really' are (e.g. Platonic forms, or subtle objects, or aspects of our minds, etc.), if they are to be at all.

[20] I am thinking in part here of Nietzsche's conception of what it would really be to be beyond requiring God (see e.g. essay 3 of *On the Genealogy of Morality* (Indianapolis: Hackett, 1998 [1887]). I believe that Nietzsche has a lot to say about for example the heavy *spirit* in which most philosophizing is still done.

In this connection, it is worth mentioning that it is occasionally hard to know whether Dummett actually does want his proposals about time to be taken seriously at all—in which case perhaps I *would* be outright more sympathetic with him than with his opponents! I am referring especially to the moment on p. 509 when, much differently to his usual rhetoric, he speaks of 'the units of which time is composed' as a '*metaphor*'. So, are all possible answers to the question, 'What is time?' or 'Of what is time composed?' equally metaphorical? Is the issue between Realist and Fuzzy Realist and Constructivist an issue only of which metaphors we find the most appealing? Or of which are most conducive to scientific progress? Is there perhaps after all in Dummett some genuine spirit of wanting 'Anti-Realism' to be a path beyond the sterile quasi-theistic metaphysics of Realisms?

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but this cannot be done *coherently* except in the genuinely Wittgensteinian style of philosophizing that I have tried to essay in this paper, a thoroughgoingly 'negative' style which Dummett, the great theoretical Anti-Realist, is, it would seem, not prepared to embrace.

Sometimes, then, I would rather deal with the honest and plain metaphysics—the visible absurdities—of the likes of David Lewis and Timothy Williamson and Roy Sorenson, than with the subtle latent nonsense of 'constructivism'.

I offer no answer whatsoever to 'questions' such as 'Is time a continuum of instants?' Rather, I ask what it could possibly mean to say that it is (and by extension, whether it can mean anything at all to say that it isn't).

In physics, 'time' is whatever it is, and philosophy will never second-guess physics successfully or even, I suspect, remotely usefully.[21] In normal social life—in the alleged 'domain' of the

[21] This however is *not* to suggest that there are no ways in which philosophical reflection can help in (relation to) science—only to imply that those ways are quite orthogonal to those of Dummett and his mainstream critics. Philosophising can clarify the 'logical grammar' of scientific and non-scientific 'language-games' involving the word 'time' and related words. In particular, by either showing a certain dispensability of time (as to some extent Einstein does) or by showing the indispensability in general of time (as to some extent Wittgenstein and I think some Recent Continental thinkers do), or both (in different respects and contexts).

Roughly thus is how I think we should understand the justly-famous quotation from the great philosopher-scientist, Heinrich Hertz that I give below. Hertz in the original text is discussing chiefly difficulties around the concept of 'force'; I have taken the liberty of substituting the word 'time', to which I think highly parallel considerations apply: '[W]e have accumulated around [the term "time"] more relations than can be completely reconciled amongst themselves. We have an obscure feeling of this and want to have things cleared up. Our confused wish finds expression in the question as to the nature of [time]. But the answer which we want is not really an answer to this question. It is not by finding out more and fresh relations and connections that it can be answered; but by removing the contradictions existing between those already known, and thus perhaps by reducing their number. When these painful contradictions are removed, the question as to the nature of [time] will not have been answered; but our minds, no longer vexed, will cease to ask illegitimate questions.' (*Principles of Mechanics* (Toronto: General Publishing, 1956 (1900)), pp. 7–8.) I hope in this essay to have made a small contribution to something like Hertz's task, by showing some respects in which 'What is time?' and related questions are 'illegitimate', *and do not address the vexations whose dissolving is our real need*.

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'human sciences'—people generally have no trouble being in time, and would in most cases I think regard as utterly absurd and pointless any effort to say whether their experience was, for example, 'really' continuous or not.

Until we *question the questions* that metaphysics has bequeathed us, questions that we can I think bring ourselves and others to see as pointless and empty, questions that 'Anti-Realism' just as much as 'Realism' purports to have clear answers to, we will never achieve philosophical peace. And we will never achieve even the level of understanding arguably native to one and all of us, as masters of the language and as competent social actors: the understanding of time, as lived, as a ubiquitous tool, a variegated *organizational* phenomenon, saturating our conceptions, our experience, our interactions, our activities. Time is in the end no more mysterious than other more mundane organizational devices: such as maps or tape-measures.[22]

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