Justification, Realism and the Past[1]

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Can we explain our understanding of past-tense statements in terms of what would justify them? It is Michael Dummett's contention that we can. In his Dewey Lectures at Columbia in 2002, and in his resulting book *Truth and the Past* (2004), Dummett presents his most mature exposition of a justificationist position, after more than forty years' reflection and writing on the issue.[2] A striking aspect of the particular variety of justificationist position developed in *Truth and the Past* is that Dummett conceives of it as "repudiating anti-realism about the past – the view that statements about the past, if true at all, must be true in virtue of the traces past events have left in the present" (ix). Dummett describes his recent investigation of this position as an experiment. My starting point in this paper is the question of whether the experiment succeeds.

The case of the past is arguably the most unintuitive and recalcitrant for any justificationist, verificationist - and equally for any pragmatist - approach to meaning and content. In my view, there is an immense amount to be learned from examining Dummett's detailed proposals in his attempt to face these challenges head-on. In this paper I argue that no justificationist treatment of these issues can succeed, for reasons of principle. That is half of my task. The other, more positive, half of the task is to present and argue for the outline of a different account. The positive account gives truth a fundamental role that it does not have in justificationist, verificationist or pragmatist theories. The account also suggests a quite different model of the relations between truth and justification. This alternative model is also applicable to other domains beyond the past.

1. Dummett's Account

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[2] All page references, unless otherwise specified, are to this volume.

A justificationist theory of meaning, in Dummett's treatment, specifies the meaning of a statement in terms of the grounds for asserting the statement (26). The intuitionistic theory of meaning for arithmetical sentences is one such justificationist theory for that mathematical domain. Under this treatment, the meaning of an arithmetical sentence given by its proof-conditions. These meaning-specifying proof-conditions are determined componentially. The meaning of an individual arithmetical expression is given by its contribution to the proof-conditions of the complete sentences in which it occurs. The meaning of a complete arithmetical sentence is given by the proof-conditions which are determined by the contribution to proof-conditions made by its component expressions, together with their mode of combination in the sentence. The proof-conditions so determined can be described as the canonical proof-conditions of the sentence. A canonical ground, or a canonical justification, for an arithmetical sentence is a proof meeting the specifications in these canonically-determined proof-conditions. Providing such a meaning-determining proof is the most direct way of establishing the sentence, in a technical sense of directness proprietary to a justificationist semantics. A direct method of establishing a sentence is a method of a kind that is mentioned in the canonical specification of the sentence's meaning.

Dummett emphasizes that an arithmetical sentence can also be proved by non-canonical means. A sentence may be a surprising consequence of the axioms of arithmetic, or of some other a priori theory, and there may be a way of establishing the sentence that is not a canonical proof of the sentence in question. His illustration of this possibility is drawn from Euler's solution of the problem of whether any path that crosses all the bridges in Königsberg crosses some bridge twice. Euler proved that any such path does cross some bridge twice. Take the existential sentence "Some bridge is crossed twice on any path that crosses all the bridges". This existential sentence is most directly verified by first identifying some particular bridge; by then verifying that this particular bridge is crossed twice; and then inferring by existential generalization that some bridge is crossed twice. But Euler's proof equally establishes the existential generalization without identifying any particular such bridge, given only the information that every bridge was crossed on a particular path. Similarly, the proposition that $13^2=169$ can be established by all sorts of complicated proofs other than simply a computation that

involves adding 13 to itself the requisite number of times. All of these proofs are indirect, non-canonical, and genuine. They are not, however, the ground or justification of the sort canonically determined by the meaning of the statement itself. The canonical justification of 13^2=169 involves a series of successive, cumulative additions of 13: 13+13+13……=169 (for 13 occurrences of '13').

Dummett holds that the recognition that there are non-canonical, 'indirect' means of establishing sentences should come "as a relief" (44) to the justificationist attempting to give an account of past-tense sentences. Dummett's thought is that a non-canonical proof is still a proof, and what a non-canonical proof shows is that the proposition in question could have been verified in the direct way that corresponds, on a justificationist theory, to the sense of the sentence as determined by its components and syntactic structure. In applying this idea to the case of the past, Dummett's Columbia lectures offer a treatment of the meaning of past-tense statements that contains the following five theses.

(A) The truth of a past-tense sentence "consists of its being the case that someone suitably placed *could have* verified it" (44).

(B) Thesis (A) amounts to what Dummett regards as a modified justificationist theory. His view is that a purely justificationist theory would involve a stronger anti-realism about the past, one to the effect that the past exists only in what we would call its present traces. Such an anti-realism was formulated and discussed in Dummett's earlier writings on the past, notably in his paper 'The Reality of the Past' (1978), and in his Gifford Lectures.[3] In *Truth and the Past*, at least, Dummett is experimenting with a rejection of this stronger anti-realism.[4] He notes that on the modified justificationist theory with which he is experimenting, a central general principle of justificationism is still maintained: "a statement about the past can be true only in virtue of an actual or possible direct verification of it" (70).

(C) The distinction between direct and indirect means of establishing statements is preserved in this modified justificationist account. Consider the statement "Your sister

[3] See especially the formulation of anti-realism on p.373 of 'The Reality of the Past'. The Gifford Lectures are as yet unpublished.

[4] Dummett should not be regarded as having changed his view, but rather as trying out different philosophical options at different times. "I do not think anyone should interpret everything that a philosopher writes as if it was just one chapter in a book he is writing throughout his life. On the contrary, for me every article and essay is a separate attempt to arrive at the truth, to be judged on its own" (x).

must now be sitting down to her breakfast". According to Dummett, we credit to even a child the consciousness that if he were to go downstairs and, a little later, observe his sister having her breakfast, "this would not be the most *direct* way of verifying the statement" (53). To already be in the place referred to, and to observe the relevant state of affairs at the time referred to, "is the only *direct* way to verify the statement" (54).

(D) The grasp of a statement about what is happening elsewhere "falls into two parts: one is an understanding of what it is for a state of affairs of the type in question to obtain or an event of the type in question to occur; the other is our knowledge of how to locate it on the grid which serves to particularize the place referred to" (57). Dummett eventually concludes that an analogous account of thought about what obtains, or is happening, at other times is equally correct (65ff.).

(E) It is a mistake "to argue that a conception of reality as existing independently of being observed must be prior to and inform the observational practice that we learn: it is by learning that practice that we acquire such a conception" (71). The idea of observation as revealing something that would have been so even if the observation had not been made "is a sophisticated thought, which ought not to be attributed to a child who had been taught to say how things are by looking, feeling, or listening" (70-1). The Dummettian child does not have the conception of reality as existing independently of being observed.

2. Tensions and Objections

There is a fundamental difference between a proof that establishes an arithmetical statement and a perception that establishes a statement about the observable world. A proof, considered as a sequence of sentences that are themselves expression-types, is something whose existence is entirely mind-independent. The proof exists whether or not anyone has ever given it, or contemplated it, or stood in any other psychological relation to it. A perception is a mental state or event. It is essentially something mind-dependent. Even if the content of the mental state is conceived, as on McDowell's account, as some kind of fact involving a state of affairs in the non-mental world, the perception itself involves a psychological relation to that fact. This contrast between the mind-

independence of proofs and the mind-dependence of perceptions has consequences that ramify throughout the theory of intentional content. In my judgement, the contrast is a symptom of the deep difference between the nature of arithmetical thought and the nature of thought about the spatio-temporal world.

There are substantial internal tensions that emerge when we try to carry through an application to the spatio-temporal case of the distinction between direct and indirect methods of justification in the way Dummett proposes.

Take an arithmetical equation built only from canonical numerals, together with vocabulary for addition, multiplication and identity. Whenever such an equation is true, there exists a proof of it. (Realists and arithmetical intuitionists will agree thus far.) The intuitionist holds more generally that in every case in which any arithmetical sentence is true, there exists a proof of it. Both in the case of the equations, and in the case of other arithmetical sentences, an indirect method of proof of an arithmetical sentence quite properly establishes for the justificationist that a canonical proof of that sentence exists, even if no one has written out or encountered such a proof. By the justificationist's standards, this means that the indirect method establishes the truth of the arithmetical sentence. Since we can know that there is a proof that 1257^2 is 1580049 (it is) without having seen or worked through a proof of that fact, this use and application in the arithmetical case of the direct/indirect distinction is not intrinsically problematic. In the spatio-temporal case, however, as expounded by Dummett, we confront a crucial disanalogy. A successful use of an indirect method of establishing what is going on at some place-time other than one's current location does not establish that there is a *perception* of what is going on at that other place-time.

It is no simple matter for the justificationist, as characterized by Dummett, to explain away or discount this disanalogy. Certainly it does not seem plausible from the justificationist standpoint to modify the account of the arithmetical case. It is not as if it were open to the justificationist to say that we have some grasp of what it is for an arithmetical sentence to be true even when there is no proof of it, so that the apparent disanalogy disappears. That would be to abandon justificationism (or at least proof-based justificationism). The very attraction of the direct/indirect distinction, and its applicability in the mathematical case, is wholly dependent upon the idea that a sound indirect method

establishes the truth of a sentence on a conception of truth that is characterized independently of any mention of indirect methods.

We can distinguish at least three types of intended justificationist theory. Theories of the first type give as the canonical justification – the direct, meaning specifying justification - for a predication (of an observational property) of another place-time the perception of something being the case then and there. This is the type we have just rejected as clearly false. One of the other two types, the second type, takes as the direct, canonical justification the condition that the other place-time falls under the same kind as a place-time that is observed to have the observational property in question. This second type takes the indirect method to be given by the counterfactual about what would be observed to be the case at the other place-time. The third conceivable type of intended justificationist theory takes the counterfactual as the direct justification-condition. The three types of theory can be diagrammed thus:

	Meaning-specifying condition for a predication of observational concept of a place-time	Indirect Method
Type One	Perception of state of affairs there	Counterfactual, or maybe same-kind condition
Type Two	Same kind as in observational application	Counterfactual
Type Three	Counterfactual	?

There are also difficulties with theories of Type Two and of Type Three, both in themselves, and in reconciling either one of them with everything Dummett says about the kind of theory he accepts.

Theories of Type Two aim to take the meaning-specifying, direct justification-condition for a statement about another place-time to be that it has the same property as is observed to be instantiated when the thinker makes a present-tense predication of an observed place or object, on the basis of perception. How are we to conceive of the uniform, single property that can be recognized by observation to be instantiated in some event or object at one's current location, and can also be instantiated unperceived elsewhere? In order to make sense of this conception, we must think of what is observed to be the case as something that can also hold unobserved. Pre-theoretically, this seems to be entirely intuitive and unproblematic. From the theoretical standpoint of a justificationist theory of Type Two that employs a direct/indirect distinction, it may also seem to be just what is needed. For to say that the property could be instantiated unperceived may seem to be the analogue for the spatio-temporal case of saying, in the mathematical case, that there is a proof that has not in fact been written out. So, it may seem, 'could have been established' characterizes what Dummett calls the indirect case in both the mathematical and the spatio-temporal case, just as he said. Type Two theories seem to have just the properties that Dummett at some points endorses. Sometimes he insists, rightly in my view, that a counterfactual about what would be observed if one went to the place is not what is actually said in a statement about what is going on elsewhere. "What it [a statement about what obtains elsewhere – CP] says is that at that particular location on the spatial map is something of a kind he can recognize when he himself is at the right location" (51). This is just what a Type Two theorist would also say.[5]

But are the resources used in theories of Type Two really available to Dummett's justificationist? The intended position of such a theory holds that what is said in a statement about the instantiation of an observational property at another place is that, in Dummett's words, "at that particular location on the spatial map is something of a kind

[5] Someone might read the quoted sentence from Dummett as using merely a 'pleonastic' notion of sameness of kind, of the sort discussed by Stephen Schiffer, in his *Remnants of Meaning* (1987). For this notion of sameness of kind, it would suffice that the same linguistic predicate is used in the thinker's accepted sentences about his current location and those about other locations. But this pleonastic reading cannot be relevant to questions about the nature of understanding, because it implies no positive commitments at all about the relations between understanding of the local and understanding of the non-local predications. Our concern is with how Dummett's justificationism could address questions about understanding.

he [the thinker – CP] can recognize when he himself is at the right location". If a justificationist is to appeal to contents like this, he must give a justificationist account of their nature. The content itself involves an identity of kind: an identity of a kind instantiated by the unperceived thing or event with a kind instantiated by things or events that the thinker can recognize. How is this identity itself to be explained in justificationist terms? In the arithmetical case, we do have a justificationist account of identities formed with complex arithmetical terms on each side of the identity. If the terms are formed from certain canonical arithmetical vocabulary (successor, plus, multiplication), the identities are decidable, and the canonical decision procedure can be appealed to by the justificationist when asked for an account of the sense of the identity, even if it is one that is actually proved by indirect means. But what can the justificationist offer in the case of an identity of kind between observed thing or event, and thing or event unobserved by the thinker?

Dummett does not address this question. One apparent option would be to appeal to counterfactuals again. That option holds that for the identity of kind to hold between the observed and the unobserved cases is for certain counterfactuals about what would be observed to be true. But this is an answer which implies that the counterfactual is not being treated as an indirect method, but as something independently written into the grasp of the sense of predications about other places – the answer is being offered as something to put in column one of our table, an answer that addresses the question of meaning-specifying conditions. The defence is, consequently, not a defence of a theory of Type Two. The defence then also incidentally has no account of what an indirect method is, once counterfactuals are included in the direct method. This defence does not fit Dummett's description of his theory at all.

Another option would be to pursue some analogue, for the spatial case, of the intuitionist's 'can be proved' when the latter speaks of indirect proof in the arithmetical case. To sustain the identity of kind at stake in this stage of the argument, we must identify some kind which is discovered to be instantiated when the thinker is perceiving the object or event, but which can also be instantiated when no one is perceiving the object or event, and whose instantiation captures the meaning of the predication in question. To this end, another option that may tempt the justificationist is simply that of

saying that if, for instance, we are concerned with a predication of a particular spatial shape of an object, then the sameness of kind in question is simply sameness of shape; and *pari passu* for other types of predication.

It is a deep question, for another paper, whether a primitive use of identity is available to a justificationist position (some of the remarks later in the positive part of this paper bear on that issue). However that may be, this option is not open to Dummett himself. The commitments of theories of Type Two, when interpreted in accordance with this option, are incompatible with Dummett's view of observation as stated in his Thesis (E) above. Thesis (E) implies that the ability to make observational reports does not involve possession of the conception that what is observed is something that would or could exist even if not observed. Theories of Type Two, as construed under this option, require the child to grasp something that is, by the terms of Dummett's conception of observation in (E), unintelligible. Dummett says that the child who is capable of making observational judgements is not, simply in virtue of that, to have any conception that what is observed can exist unobserved. But theories of Type Two, under this option, imply that the child, in understanding predications about locations other than his own, appreciates that what is being said is that something is going on, or exists, that is of the same kind as he can observe when such events or objects are at his own location. For this identity to be so much as intelligible, the child must have the conception that what he observes is something of a sort that can exist unperceived, at locations other than his own. If the child does not already have this conception, giving the child the information that things elsewhere are F if they have the same property as the things he observes to be F is not going to make it any more intelligible that the property that can be observed to be instantiated can also be instantiated unperceived. The information involved in such an understanding of predications of other places presupposes some grasp of this as an intelligible possibility. The information by itself cannot make that possibility intelligible if the child does not already find it intelligible.

It would not help if Dummett's view is that the child, in making judgements based on observation, is also to be ascribed the conception of other subjects as also capable of making observations. We have to explain understanding of a predication of, say, a shape property of an object as something that can be true even if the object is unobserved by

anyone at all. There would still be a problem of unintelligibility on such a more socially-oriented account. The problem would be transferred to the transition from a conception of a property of which the thinker need not have any conception that it can be instantiated unperceived by anyone, to a conception which requires that the thinker have that conception. Such a transition still cannot intelligibly be effected simply by the thinker's use of an identity relation.

The upshot of the discussion to this point seems to be that attempting to give theories of Type Two justificationist credentials via counterfactuals is making the direct/indirect distinction inapplicable in those theories; and that making sense of the identity of kind required in Type Two theories makes them incompatible with Dummett's conception in Thesis (E) of observation and observational judgements. My own view is that (E) is false anyway, for reasons that I will discuss later.

We turn to theories of Type Three. Would it be correct to take the meaning-specifying justification condition for a predication of another place-time to be given by the counterfactual (regardless of what we go on to count as an indirect method)? That is the distinctive claim of theories of Type Three. This position would have to say something about the fact that when, for instance, we experience it to be sunny here, and take the experience at face value, we do not, before making the judgement 'It's sunny here', make a transition to a counterfactual 'If someone were to be here, he would observe it to be sunny'. But, the defender may continue, this would be a sound inference. The inference from the pair set of premises {A, B} to the counterfactual 'If A were to be the case, B would be the case' is intuitively valid, and it is rightly treated as valid in both Stalnaker's (1968) and Lewis's (1973) semantics for counterfactuals. We may not explicitly insert the counterfactual step in coming to make an observational judgement about how things are here, this justificationist may say, but our practice is legitimate, and there is uniform account of the sense of sentences about place-times, only because it could be validly inserted.

The objection to this account is not from its lack of uniformity, but from the fact that the counterfactual condition is incorrect, both for predications of the thinker's current location, and for predications of other place-times. At least some of these points are familiar from other literature, and I will go through them briefly.

(i) It's being sunny at a place, either here or somewhere else, is what causally explains the truth of the counterfactual 'If someone were there, they would perceive it to be sunny'. Since nothing can causally explain itself, it's being sunny at a place cannot be analyzed in terms of the truth of that counterfactual.

(ii) It is widely held, and asserted by Dummett himself in some of his writings, that counterfactuals cannot be 'barely true'. This doctrine has more than one reading. But a very natural reading under which it is plausible would say that a counterfactual 'If someone were there, they would perceive it to be sunny' is, when true, true in virtue of a certain condition, the condition in (i) that explains its truth. An account of understanding of predications of places owes us some theory of what it is to conceive of these underlying conditions in virtue of which the counterfactuals are true. Once we have this, the counterfactual explication may be unnecessary.

(iii) It is by now a very old point that the counterfactual explication is not extensionally correct. The presence of an observer may affect whether a place has a certain property. The point should not be breezily dismissed as one easily met by a minor qualification. To say 'For some place to be F is for it to be true that someone there would perceive it to be F, unless his being there affects whether that place is F' is to embed the very condition 'That place is F' that was to be explicated in justificationist terms. The qualification makes the account circular.

(iv) Some theorists, in the case of statements about what is the case elsewhere now, might offer justificationist accounts that talk about what someone would observe if he were now to travel to the place in question, and arrive there a little later. Even in a case in which there are no interference problems of the sort mentioned in (iii), however, it is always an empirical, and certainly not an a priori, truth that how a place is now is the same as it was a little time earlier. Anyone who grasps spatio-temporal thought will be in a position to appreciate this fact. It follows that we must give some account of understanding statements about what is the case at other places that makes this an empirical, and not an a priori truth. We will not be doing this if we try to identify the truth of the predication with a counterfactual about what would be experienced by someone who travels to the place in question.

(v) These issues cannot be separated from the question of what individuates the intentional contents of mental states and events, both perceptions and judgements. Suppose it is true that a thinker elsewhere would experience it to be sunny there, and would judge it to be so. The fact that his experience and judgement would have this content is constitutively dependent upon the complex relations his experience and judgement bear to their occurrence and production in situations in which the thinker finds himself and in which it really is sunny.[6] This involves a philosophical-explanatory priority of the condition of it's being sunny at a given place in relation to a thinker's experience or judgement that it is so.

(vi) The ability to think of how it is at one's own, and at other, places and times does not seem to me to require the ability to think about other minds at all. There is no difficulty in principle in the idea of a very deeply autistic child, with no conception of other minds as having experiences and making judgements, nevertheless having the conception of places and times, both local and distant. In fact, part of what is involved in having the conception of a subject of experience who may be located elsewhere is that his states and judgements are suitably sensitive to what is objectively the case at other places. Again, this means that the conception of a subject who is elsewhere and has certain perceptions and makes certain judgements is philosophically posterior to the conception of how it really is at those places. This implies that no justificationist account of thought about other places and times that appeals to counterfactuals about what other thinkers would perceive or judge there can be correct.

There are genuine contrasts between the direct and the indirect that do apply to the distinction between observing some place-time to have a property, and establishing the counterfactual 'If someone were to go to that place-time, she would observe it to have that property'. One such contrast is this: a thinker's understanding of the counterfactual depends upon his ability to know what it would be to establish by observation that a place-time has the property in question. When a thinker has information that there is no interference from the presence of an observer (as described in point (iii) above), establishing the counterfactual is also an indirect way of establishing what could be established more directly by observation. These highly intuitive points are, however,

[6] For further discussion, see my book *The Realm of Reason* (2004), Chapter 2, section 3.

equally available to, and should be endorsed by, truth-conditional, non-justificationist theories of meaning and content. These kinds of distinction between the direct and the indirect are not to be identified with the distinction introduced in justificationist semantics between the direct and the indirect. They involve no commitment to justificationism.

Is there some diagnosis of how Dummett arrived at his position? There must surely be more going on in the thought of such a substantial thinker than a simple conflation of feature of the different theories of Types One, Two and Three. I conjecture that there is, and that the explanation of what motivates Dummett's position lies partly in his conception of observation, as elaborated in his thesis (E) about observation. Dummett's discussion of his conception is very brief (it is on one paragraph spanning pages 70-1), and it would be unfair to pin on him any specific elaboration. There are many distinct ways in which it can be true that a thinker lacks the conception of observation as revealing what would have been so even if the observation had not been made. One way is for the subject not to have the concept of perception at all; another is for the subject to possess the concept of perception, but to remain neutral on the thesis of independence from observation. But one tempting way to specify a Dummettian conception of observation in the child, a way consistent with each of these various elaborations, is to say that in making observational judgements about the world, the child bases those judgements on the content of her perceptual experience without needing to, and without actually, taking any stand on the question of observation-independent existence. Then from the point of view of the Dummettian child, it may seem to make no difference whether we give the meaning-specifying condition for a predication of an observational concept in terms of the perception of a state of affairs, or in terms of the state of affairs itself. It may seem that under these conditions, and from the point of view of the Dummettian child, theories of Type One and of Type Two can be identified. The canonical justifying condition for such an observational sentence is given indifferently, for the Dummettian child, as the holding of an observational property/ the perception thereof; and the indirect condition is given by the counterfactual. This makes it much more intelligible how Dummett might come to hold such a position. It does not, however, make it more defensible. Either the canonical, meaning-specifying condition for an

observational sentence requires perception of a state of affairs, or it does not. If it does, then the objections above to Type One theories apply. If it does not, then the objection to Type Two theories apply. If the child's – even the Dummettian child's – observational judgements concern the world, rather than his own perceptions, as is plausibly the case, we have to give a correct account of the child's grasp of such truth-conditions. This point still holds if the child herself does not distinguish the objective truth-conditions *in extenso* from her perceptions.

We could of course form a genuinely different, intelligible justification condition that requires that a state of affairs both obtain and is also perceived. But it is not the justification condition for a content like 'It is raining in the next village'. It is at best the justification condition for the different content 'It is raining in the next village and is perceived to be so'.

I conclude this section with two observations. One concerns the relations between metaphysics on the one hand, and the theory of meaning and understanding on the other. Many of the points on the above list (i) – (vi) support the position that a good account of meaning and understanding has to draw on a correct metaphysics of counterfactuals, of explanation, and of perceptual experience. Far from settling questions of metaphysics, the theory of meaning and understanding requires distinctions and points drawn from metaphysics. So my position here also diverges from the contrary view for which Dummett argued in his book *The Logical Basis of Metaphysics* (1991).

The other observation concerns a curious feature of *Truth and the Past*: that there is in that book little discussion of memory in our understanding of past-tense statements. 'Memory' and 'remembering' do not feature in the index to the book, and such discussions of memory as there are concern such matters as the extreme version of anti-realism under which "only what exists now can render any statement true or false" (67). Dummett's own version of justificationism as applied to past-tense thought, and the justification conditions he offers, each presuppose the subject's ability to think about past times. It is implausible that someone can think about past times without having some

form of memory capacity, some ability to perceive temporal order and possibly intervals.[7] Further examination of the essential role of memory in having some concept of the past seems to me to emphasize some of the difficulties for the justificationist that we have noted. Here are two.

First, if we accept that past-tense statements are equi-categorical with their present tense counterparts, it follows that a past-tense predication of an observational property should not be explained in counterfactual terms (even when we prescind from interference, pre-emption and the like). In the present-tense case, the presence of the observational property causally explains the truth of the counterfactual about what a perceiver would experience when perceiving the object. It follows that the past-tense counterpart is equally causally explanatory of the corresponding past-tense counterfactual. The truth of the past-tense counterpart should not be identified with the truth of the counterfactual, under the thesis of equi-categorical character.

The second point emerges from reflection on what individuates memory states with their past-tense intentional contents. Though in this paper I cannot do more than give a statement of position, it seems to me that these states have the contents they do in part because they are, when all is functioning properly, caused by the past-tense states of affairs they represent as obtaining. That is, states with past-tense contents have their contents in virtue of certain of the causes of some such states, just as spatial perceptions have their content in part in virtue of the spatial states of affairs that, when all is functioning properly, cause those spatial perceptions. That is, both the memory states with temporal contents, and the perceptual states with spatial contents, are instance-individuated in the sense of *The Realm of Reason*.[8] But instance-individuation in the case of memory involves causation by conditions obtaining in the past: and I would argue again that this is incompatible with their consisting merely in the truth of certain counterfactuals.[9]

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[7] A version of this thesis is actually formulated in highly compressed form on the last page of Wittgenstein's *Philosophical Investigations* (1953): 'Man learns the concept of the past by remembering'. An elaboration and some defence of the claim are given in my *Being Known* (1999), chapter 3.

[8] *The Realm of Reason*, Chapter 2.

[9] Dummett does not, or at least in 1997, did not accept this metaphysics of explanation. See the report of his views in *The Realm of Reason* at p.40. So on this particular point, I should be regarded solely as tracing out the consequences of his views. Construed as an objection, the point relies on further metaphysical theses (for which I tried to argue in *The Realm of Reason*, pp.40-49).

3. A Realistic Account: Elements and Consequences

We can start by considering a realistic account of observational concepts and their application. It is part of the nature of these concepts that they can be applied on the basis of perceptual experience. A thinker may also intelligibly, and on occasion correctly, apply the concepts to things or events that he does not perceive at the time of application of the concepts. Relatively uncontroversial examples of such concepts include *smooth, rough, straight, square, oval, stationary, moving, bent,* to take an arbitrary sample. When one of these concepts is applied by on the basis of observation, the thinker takes the representational content of his experience at face value. It thus becomes crucial in specifying the nature of these concepts, and the conditions for their correct application, to consider the nature of the representational content that is so taken at face value.

In my view, this representational content is objective content in that it is individuated (in part) by specifying how the space around the perceiver must be filled in with matter and light for the experience to be correct. Space, ways it is filled in, and the matter and light with which it can be filled in are all mind-independent things. This means that mind-independent correctness conditions are intrinsic to the nature of perceptual experiences, and to the observational concepts that are individuated, in part, by their relations to these experiences. Insistence on this point is the first component of a realistic account of observational concepts. We can call it 'the objective-perceptual component' of the realist's account. The objective-perceptual component is a foundation that is needed for the other elements and theses of a realist's account of these matters.

To say that the representational content of an experience is objective, and to say that the correctness conditions for judgements involving observational concepts are objective, is not to say that anyone who employs observational concepts must himself be exercising some notion of objectivity. A thinker can employ observational concepts without possessing a concept of experience or of perception at all. To exercise concepts with objective conditions of correct application is one thing, to have a conception of objectivity is another. Whether or not Dummett's thesis (E) above about observation is correct in its full strength, part of what he may have intended in it is surely right. A

conception of observation as observation is more sophisticated than, and is not implied by, the capacity to observe and make observational judgements about the world.

To say that objective content is independent of possession of a conception of objectivity is not at all, however, to say that possession of observational concepts is independent of the capacity to think of objects, events or states of affairs that are in fact unperceived by the thinker. A subject can think or otherwise represent 'There's a large rock behind me' without possessing the concept of perception (and without using a mirror). There is, for reasons of principle, a link between the ability to enjoy experiences with objective representational contents and the ability to represent what are in fact objects, events or states of affairs that are unperceived by the thinker at the time of the experience. Part of what gives experience its objective representational content is the capacity of its contents to be input to a cognitive map of the subject's environment, a cognitive map which in the nature of the case maps regions of space that are currently unperceived by the subject. The map locates objects, events and features in those currently unperceived regions.

In fact, young children and infants have a rich conception of the world that is not currently perceived by them. This conception affects their knowledge and action, and it predates by years their ability to use language to make observational reports on their surroundings. Later linguistic practice draws in part on this rich conception, rather than contributing to making it available, contrary to Dummett's assertion. The detail and characteristics of the infant's and young child's conception of the world as unseen by him at a given time has been extensively confirmed in a justly famous body of work in developmental psychology in the past twenty years. I mention two examples. Consider an object whose center is occluded by a closer object. Kellman and Spelke showed that four-month old infants perceive the occluded object as continuing behind the closer object when the visible parts of the occluded object move together.[10] The infants are surprised if the occluded object is revealed to be discontinuous. Baillargeon showed that infants from the ages of 4.5 months to 5.5 months who see an object that is then obscured by a second object expect the second object not to be able to move into a location occupied by the

[10] Kellman and Spelke (1983). For an excellent defence of the methodology of these and related experiments, see Spelke (1998).

first (and now unperceived) object.[11] These, and many other cases, are ones in which the phenomena are best explained by the hypothesis that the infant has a specific conception of how the world is in the regions he is not currently perceiving. Real children are not Dummettian children (in the full sense of his Thesis (E)).

So much by way of introductory remarks on the first component, the objective-perceptual component, of the realist's account of understanding. The second component of the realist's account explains understanding of what it is for an unperceived thing or event to fall under an observational concept by relating that understanding to the case in which some perceived thing or event falls under that concept. For the concept *oval*, say, the second component of the realist's account states that a thinker's grasp of this concept involves his possession of tacit knowledge of this condition:

> For an arbitrary thing to be oval is for it to be of the same shape as things of this sort

where 'this sort' expresses a recognitional way of thinking of a sort, a recognitional capacity exercised when the thinker is presented in perception with a thing as oval-shaped. What is said here for the concept *oval* can be generalized, according to the realist, to an arbitrary observational concept, with a suitable substitution for 'same shape'. I call this second element of the realist's account 'the identity component'.

The identity component aims to explain understanding of a predication of an observational concept of an object or event not currently observed by the thinker in terms of a grasp of truth conditions. The identity component specifies a truth-condition for the predication in the content of the tacit knowledge it attributes. This is not an account of understanding in terms of justification, assertibility, consequences, or counterfactuals.

This second component is available to a realist only because of the objective-perceptual account, the first component of the realist's theory of understanding in this domain. For an unperceived thing to be oval is for it to have a mind-independent property. The sort under which a thing is presented as instanced in perception must itself be a mind-independent kind if the identity displayed above is even to be intelligible, let alone true. That the sort presented in perception has this property is just what is stated in

[11] Baillargeon (1987); and for a more general survey, see Baillargeon (1993).

the first component of the realist's account. If the first component is correct, the realist is not appealing to unintelligible or illegitimate statements of identity.

The second component of the realist's account holds only for observational concepts. The role of the perception-based way of thinking of a sort in the identity that is (according to the realist) tacitly known is specific to observational concepts. Consider the observational concept *elliptical*. This concept is distinct from the shape concept that is given by the equation for an ellipse in geometry with Cartesian coordinates. Someone can think of a shape under its equation specification, and wonder what the graph of that equation looks like. This is not possible for the observational concept, when it is fully grasped.

The identity component of the realist's account meets five desiderata that emerged from the preceding discussion.

(a) By explicitly writing in that for something unperceived to be oval is for it to have the same shape as the perceptibly oval things, it ensures that there is uniformity in what is being predicated of an unperceived and of a perceived object when each is being thought to be oval.

(b) The shape property that is being attributed to perceived and unperceived oval things is explanatory of perception of a thing as oval when it is perceived.

(c) This realistic account actually, and ironically, restores a parallel with the decidable mathematical case that we argued was lacking on the Type One reading of Dummett's account. What make*s* a predication of *oval* of an object true is an objective property, whether or not the property is perceived to be instantiated. What makes a decidable arithmetical equation true is the existence of a certain kind of proof, whether or not anyone has encountered or thought of such a proof.

(d) It is, under the realist's identity component, a wholly empirical question what, now, would establish that some damp patch on the wall on a building across the street, unobserved by anyone, is currently oval in shape. All that is required for this to be true is that the patch has the same shape as things the thinker can recognize to be oval. If one goes across the street and observes the patch to be oval, that is evidence for the earlier claim only if the patch has not changed in shape. There may be very good evidence that it

has not; but that it has not is a wholly empirical truth, whose status as such is made intelligible by the identity component of the realist's account.

(e) The two components of the realist's account of grasp of observational concepts can be fulfilled without the thinker having any conception of mental states, either his own or others.

4. What is the Relation between Justification and Truth? The Realist's Answer

If content is conceived in terms of truth-conditions, rather than justification conditions, what is the relation between a thinker's grasp of the truth-conditions of a content and his appreciation that something justifies acceptance of that content? If contents are not individuated in terms of what justifies acceptance of them, how do we reach a justification from something that does not involve justification? We know that we do have justifications, empirical justifications, for accepting particular propositions about times and places at which we are not located (for example). Our question is not whether this is so. Our question is what, under the truth-conditional account, makes this possible.

The question about the relations between truth-conditions and conditions of justification is not one that arises only for issues about our understanding of the past and other places. The question arises for any domain in which content is explained in terms of truth-conditions. Correspondingly, any good answer to the question must be generalizable to other domains; or must at least be shown to be an instance of a schema applicable in other domains in which the issue arises. This wholly general question that has in fact long been pressed by Dummett. He has written of it as "a demand upon truth-conditional theories of meaning if they are to qualify as fulfilling what is required of a theory of meaning" that they show "how what we count as evidence for the truth of a statement can be derived from what we take as the condition for its truth" (115).

'Derived' is much too strong in this statement. As Philip Kitcher remarked to me, it is completely implausible that, in the general case, one can literally derive a statement of what would be evidence for a hypothesis from some specification of its meaning alone. What is evidence for a hypothesis must in the general case depend also on empirical

information not derivable from a specification of meaning for the hypothesis, however theoretically rich that specification may be.

A more plausible claim is that, when something is evidence for a hypothesis, there is some explanation, stemming in part from the nature of the meaning of the hypothesis, but drawing also on empirical information, of why it is evidence for the hypothesis. I accept this claim, and the challenge it generates: to say what the explanation is. The intuitive basis of the demand is that it is some feature of the meaning-determined truth-condition of the hypothesis that, in the presence of further empirical information, makes something evidence for the hypothesis. Correspondingly, when we appreciate that something is evidence for a hypothesis, we draw in part on our understanding of that hypothesis. Our task is to explain what it is to do this soundly, on a truth-conditional conception of content and understanding.

In attempting to meet this challenge in the special case of the past, we can start with a simple example. Suppose you look up to the sky, and in the distance see a storm approaching. It is traveling towards you along a certain path. You have some experience of the shape of the paths followed by storms in this area. These circumstances can give you a justification for judging, a little later, "It is now raining in the next village". This justification has nothing to do with whether you would encounter wet roads if you were to travel to the next village. This justification for your belief that it is now raining in the next village is equally good in a hot climate, where you know perfectly well that by the time you travel to the next village, the roads would be dry from the heat.

This justification for accepting the content "It's now raining in the next village" involves inductive inference. Induction is an inferential transition which, if it starts from empirical premises, generally yields an empirical conclusion. It is an empirical matter what kinds of paths storms take, and how long they last. The justification, in this example, for believing that it is now raining in the next village, is wholly empirical. It could not be reached simply by reflection, however resourceful, simply on the nature of the content "It is now raining in the next village". The input to the induction, its premises, are cast themselves in spatio-temporal terms. In this particular example, the premises can be known because the thinker is able to know how it is now at nearby places and at his own location. The crucial point for present purposes is that application of inductive

methods, if applied to empirical premises, can be combined with understanding of predications of one's own and other locations, to yield empirical justifications for beliefs about what is now happening elsewhere.

The same would apply to abductive inference more generally. If what is explained by a good abductive inference is something empirical, abduction will give empirical reasons for believing a particular content. In both the inductive and the abductive case, use of these methods is entirely consistent with a thinker's having no idea what in the physical world might justify acceptance of a particular predication of another place independently of use of inductive or abductive inference. If our understanding is given by grasp of truth-conditions, and this in turn in the case of other places and other times is given in terms of what I called the identity component in the realist's account, this is plausibly our actual situation.

This yields another irony when considered in relation to Dummett's account. We saw in an earlier section that he conceived of his 'indirect' methods as ones that establish for the thinker, when successful, what a predication of another place says, viz. (for a predication of an observational concept thereof) "that at that particular location on the spatial map is something of a kind he can recognize when himself is at the right location" (51). We questioned whether Dummett had a right to this conception. But the present irony is that if what I have said about the empirical character of the evidential relation for thoughts about other places and times is correct, there is no need for a thinker to grasp additional, 'indirect' methods as part of the task of grasping the sense of a predication of another place or time. That something is indirect evidence for such a predication can be established using general-purpose inductive or abductive reasoning. If a thinker is capable of such reasoning, and grasps the truth-condition for predications of other places and times, the condition formulated in terms of identity, the thinker needs nothing more to be in a position to appreciate something as evidence for a thought about another time or another place.

If the use of inductive and abductive methods, applied to empirical premisses, can yield empirical justifications for contents whose nature is explained by the identity component, this reconciliation ought to be available in other domains in which we have the apparent combination of content explained in terms of an identity component, and in

which evidence or justification seems always to be an empirical matter. Almost any description of these areas is going to be somewhat controversial, so here I will just have to plunge in with a statement of the views. A thinker's understanding of attributions of sensations and experiences to others (and arguably to herself in the past) involves an identity component. The thinker appreciates, on this radically non-Wittgensteinian account, that for someone else to have a pain in her knee, or a tinge in her wrist, is to have something of the same subjective kind as she herself has when she has an experience of each of these respective types. There does also seem always to be an empirical element in the conditions that justify the ascription of a pain-sensation, or a tingling-sensation, to another person. What physiological conditions, and what central neurophysiological conditions, accompany or realize pain or tingling sensations seems always to be an empirical matter. Which empirical conditions they are that accompany or realize these sensations can be known by inductive and abductive inference, inferences starting from empirical premises about one's own sensations and experiences. It is this combination of the presence of an identity component in the account of understanding, together with empirical elements in any justification-conditions, that explains the phenomenon that Albritton famously noticed. As he noted, following Plantinga, it always makes sense to ask "I wonder how people who are in pain behave nowadays?".[12]

A very different kind of domain in which we have the combination of an identity component in understanding combined with wholly empirical justification conditions is that of highly theoretical postulation in physics. We can take superstring theory as an example.[13] The current theory postulates that in addition to the three perceptible spatial dimensions, there are also another seven dimensions 'curled up', and too small to detect by traditional methods or by perception. There is an identity component in the account of our understanding of what it is to be one of these additional dimensions. They are conceived as things of the same general kind as the familiar three spatial dimensions. A full specification of location in the universe, under this theory, involves specifying location along each of these seven additional dimensions, just as it does for the traditional dimensions. Some physical properties can vary independently along these additional

[12] See R. Albritton, 'Postscript (1966)' (1968).
[13] For an accessible exposition, see Green (2004) esp. chapters 12 and 13.

dimension, just as they can along the four more familiar physical dimensions; and so forth. But the evidence, the justification, for accepting particular propositions about location in any one of the new dimensions, is always a wholly empirical matter. It is not given a priori by the nature of our understanding of the existence of these dimensions. The evidence is wholly a posteriori. Abductive inference, with empirical premises as input, provides an explanation of how this is possible. One of the achievements of superstring theory is to explain the families of fundamental particles, and the particular masses and spin properties they have. That electrons, quarks and gravitons have the particular masses and spin properties they do is a wholly empirical matter. Superstring theory explains the existence of these properties, and the particular families of particles, by the possible energy levels of particular strings in the new dimensions with which these particles are identified. That there are particular kinds of string with particular energy properties is justified by abductive inference from wholly empirical facts. Once again, we reconcile an identity component in understanding with wholly empirical justification conditions by means of empirical input to a justifying abductive inference. The fact that understanding is explained in truth-conditional terms is thus reconcilable both with the existence of justifications for propositions about the new dimensions, and with the empirical character of those justifications.

Could the justificationist simply take over the points I have been making, and say that on a more generous construal of justificationism, these points present no problem for that thesis? Empirical justifications are nonetheless justifications; so why should the justificationist not appeal to them? The answer to this question is that the empirical character of the justifications is symptomatic of the fact that the correct account of what is involved in understanding the contents in question does not imply, even in the presence of other a priori theses, that these justifications are justifications. It is not open to the justificationist to appeal, for instance, to whatever might, in the presence of other information, justify the content that it is now raining in the next valley, or the content there are seven additional spatial dimensions. That would be to explain justification-conditions in terms of the content in question, rather than the other way around, which is what the justificationist's thesis requires.

A realist's account of understanding of thought about other places and times that uses an identity component seeks to explain grasp of sense in terms of the thinker's tacit appreciation of the condition required for the correctness of certain kinds of content. Since this style of account of concept-possession is present in some other basic cases, it should not be regarded as something recherché or unfamiliar. The possession condition for a predicative observational concept contains a clause to the effect that when the concept is predicated of an object not currently perceived by the thinker, the predication's truth requires the object to have the same property as is possessed by an object when the concept is correctly applied on the basis of perception – this familiar case already involves an identity component in its account of understanding (even when the unperceived object is at the thinker's location). The same phenomenon is found at the level of singular reference. In grasping what it is for an arbitrary object x to fall under the singular concept *this F*, where *this F* is a perceptual-demonstrative, a thinker tacitly appreciates that x must be identical with the one currently perceptually presented to the thinker. Again, this is a specification of grasp of sense that involves a condition on the world, formulated in terms of identity. Far from being recondite, the phenomenon is ubiquitous in thought. The conditions involved in understanding in these cases can, on this account, be specified only at a level that involves reference to objects, properties and relations in the world. The phenomenon could not be accommodated by theories that regard talk of reference and truth as a facon de parler that plays no fundamental part in the account of intentional content.

The character of the relation between justification and truth in the case of other places and other times bears upon Crispin Wright's discussion, in the early parts of his book *Truth and Objectivity* (1992), of what he calls a variety of minimalism. The variety in question is one according to which it is sufficient for something to be a truth predicate that "it coincides in normative force with warranted assertibility" (even though the predicate is potentially divergent from warranted assertibility in extension, Wright 1992 p.24). For propositions about other times and other places, we have seen that it is an a posteriori matter what warrants their assertion. If the above considerations are correct, what makes such a warrant into a warrant has to be explained in terms of truth-conditions. This means that, for such cases, the doctrine Wright describes cannot really

be a form of minimalism. To appreciate the warrants as warrants, a prior grasp of truth-conditions is required. One could not even conform to norms specified in terms of warranted assertibility, for such subject-matters, without having some additional grasp of truth-conditions not explained in terms of assertibility.

The applicability of this point is independent of whether the subject-matter in question is intuitively realistic in Dummett's sense, that is, admits propositions that could be true without our being able to know that they are true. The point applies to present-tense predications about other places, even nearby places. Even for these, it is an empirical matter what warrants assertions about them, and our understanding cannot be explained unless we mention a grasp of truth-conditions. The empirical dependence of conditions of warrant upon further truth-conditions is a phenomenon that can be present even when verification-transcendence is not at issue.

This means that one cannot soundly argue from a rejection of verification-transcendent truth to the need for a justificationist theory of meaning. At one point in the final chapter of *Truth and the Past*, entitled 'Truth: Deniers and Defenders', Dummett appears to be arguing in a way that implies that there would be no role for truth-conditions in a theory of meaning and understanding that eschewed verification-transcendent truth. I quote at length, for the passage is revealing. He writes that justificationist theories of meaning are prompted by the thought

> that when we acquire the practice of using language, what we learn is what is taken to justify assertions of different types. We learn what is accepted as entitling us to make those assertions; we learn also whether what justifies us in doing so is conclusive or whether it is defeasible, that is, capable of being overthrown by subsequent counterevidence. We do *not* learn what it is for those assertions to be true independently of any means we have for establishing their truth. How could we? If we are not in a position either to assert or to deny a given proposition, we cannot be shown what nevertheless makes it true or false. So, according to a theory of this kind, to grasp the meaning of a statement is to know what would justify asserting it or denying it. (p.114)

On the view for which I have been arguing, the conditions for justified assertion that a place that the thinker does not currently occupy or perceive has a certain property are

simply justifications for thinking that place has the same property as his current location has to have for it to have the property. Once again, it is an empirical matter what those justifications are. The only general, a priori statement of what those justifications are is an account that uses the materials of the identity-component, and uses it in giving the truth-conditions of assertions about such nearby places. But nothing here involves commitment to a verification-transcendent conception of truth about nearby places. It makes one wonder whether Dummett has overlooked certain kinds of rationale for non-justificationist conceptions of meaning.

On the general relations between justification and truth, we can distinguish (at least) three positions, in order of increasing degree of involvement of truth in an account of justification.

(i) On the first position, there is no involvement at all. This first position holds that we can specify justification-conditions that individuate a particular content, and can do so without any mention of reference and truth. This first position is occupied by such pure conceptual-role theorists as Gilbert Harman (1999) and, more recently, Robert Brandom (1994, 2000). It is natural to call it "Grade 0" in respect of the involvement of truth and reference in justification-conditions.

(ii) A second position is that it is a substantive, overarching constraint on a theory of concepts and complete intentional contents that judging in accordance with content-individuating justification-conditions further the goal that only true contents should be accepted. This was the position I occupied in *A Study of Concepts* (1992). It was motivated by the idea that truth is one of the constitutive aims of judgement, and that the constraint this involves cannot be reduced simply to facts about conceptual roles. Theories committed to this second level of involvement of the level of reference in the individuation of content will declare that for any genuine concept, there must be an account of how a reference is determined for the concept, from the justification-conditions mentioned in the possession-condition for the concept. Such an account I called a 'Determination Theory' in *A Study of Concepts*. Alleged concepts for which there is no Determination Theory are not, under this approach, regarded as being genuine concepts at all. It is, however, entirely consistent with this second level of involvement that the specific content-individuating justification conditions for a particular content be

given in terms that do not mention reference and truth at all. The introduction and elimination rules for conjunction, for example, contribute to the individuation of a concept, under this approach, but do not themselves mention reference or truth. There is a Determination Theory for them; but this theory is no part of the justification-conditions themselves, which are as given in the introduction and elimination rules in that particular example. This second position we can classify as having Grade 1 involvement of reference and truth in justification-conditions.

(iii) On a third kind of position, justification-conditions for certain kinds of contents are inextricable from reference and truth. On the realist's view as defended earlier in this paper, understanding an observational predication of another place or time involves tacit knowledge that it is true just in case that place or time has the same property that the thinker's current spatial or temporal location has when it is observed to have the property denoted by the predicate. This characterization could not be replaced with specific justificational conditions that do not mention reference or truth without giving something whose status as a justification is empirical. Knowing of what is in fact an empirical piece of evidence for one of these contents that it is evidence is neither necessary nor sufficient for understanding the predication in question.

Positions of this third kind are content-specific, in contrast with the overarching, entirely general thesis that supports Grade 1 involvement. So this Grade 2 involvement is always Grade 2 involvement for a specific concept, such as the concept of another location, or the concept of the sensations of another subject. Someone who believes there are cases of Grade 2 involvement need not be denying that some other concepts, such as that of conjunction, meet only the model of Grade 1 applies.

When faced with a general claim about the relations between justification and truth, one should always ask which of these grades of involvement are consistent with the claim. In his book *Truth and Truthfulness*, Bernard Williams writes that "A justified belief is one that is arrived at by a method, or supported by considerations, that favour it […] in the specific sense of giving reason to think that it is true" (2002, p.129). This principle could be accepted by those who hold that there is no more than Grade 0 involvement of truth and reference in justification. For these theorists will still hold that there is a legitimate notion of truth: it is just that, according to them, it plays no part at all

in a substantive account of intentional content. For example, a Grade 0 theorist may say that true contents are ones judged properly in accordance with his reference-free justification-conditions. That will certainly make the quoted thesis from Williams come out true (and very likely contrary to Williams' intentions). I cannot pursue the many issues that arise at this point. All I want to emphasize here is the nature of the Grade 2 involvement that I have argued we find in the case of other places and other times that Dummett discusses. Grade 2 involvement is something much stronger than many of the more general theses linking justification and truth that, like Williams' thesis, are consistent also with the weaker grades of involvement.

In addition to the question we were addressing earlier, of how we attain empirical justification conditions on the realist's account of understanding, there is the further philosophical question of the nature of the relation between independently specifiable justification conditions and the individuation of conceptual content on the realist's view. In the case of thought about sensations, and thought about other places and times, certain kinds of predications do have a species of justification that is independently specifiable. The first-person predications have a certain independently-specifiable justification in ascriptions of sensation and perceptual experience. Predications about what is the case here have a distinctive justification, at least in the case of observational predications, amongst predications about places. Predications about past times based on personal memory have a distinctive justification amongst predications about other times. We can say that, in this respect, the possession conditions for concepts of sensation, of places, and of times have a *direct anchoring* in the sense that at least one clause of the statement of the possession condition relates possession of the concept to an independently-specifiable justification-condition.

Concepts of the additional dimensions proposed in superstring theory, by contrast, do not meet this condition. There is no location in the seven dimensions that has, for the thinker, a special role in his understanding of their existence. Nonetheless, the additional dimensions are thought of as having certain relations to the familiar dimensions, our concepts of which do give a special role to the thinker's location. So in addition to the concept of a possession condition with direct anchoring, we can introduce the idea of a possession condition that has *linked anchoring*. Linked anchoring has a recursive

characterization. A possession condition with linked anchoring either has direct anchoring, or one clause of a statement of the possession condition relates possession of the concept to a concept that has linked anchoring.

I conjecture that the following thesis is true:

Every concept has a possession condition with linked anchoring.

That is, there are no unanchored possession conditions. We can call this 'the Anchoring Principle'.

What are the general reasons (beyond induction from examples) for believing the Anchoring Principle? They are:

(i) If the Anchoring Principle is violated, it is not clear how the thinker could ever have well-founded reasons for believing a thought. Reasons would always relate to other judged thought-contents. Unless rational acceptance of these thought-contents is ultimately related to such states as perception, sensation, action-awareness, memory, testimony, reasoning and calculation, there would never be a reason-giving state that was not another judgement for which the question of rational acceptance would equally arise.

(iii) As John McDowell emphasizes, we would not have the required kind of connection with reality itself unless perception and other content-involving states other than judgement are involved in the individuation of some intentional contents (1994, Lectures I and II).

The Anchoring Principle is neither a verificationist principle nor a justificationist principle. The realistic account of understanding of observational spatial contents that I have been defending, an account that is neither verificationist nor justificationist, gives an essential role to perception. Since perception is not a form of judgement, this realistic account respects the Anchoring Principle. Correspondingly, the strong intuitive support enjoyed by the Anchoring Principle should not be mistaken as an argument for justificationism, nor for verificationism. A properly formulated realistic account of understanding should embrace the Anchoring Principle.

5. Further Tasks and Concluding Remarks

There is a great deal more to be said about the nature of the knowledge attributed to the thinker in the realist's account of the understanding of past-tense thought and language. To say that this knowledge cannot be reduced to justification-conditions, and perhaps cannot be reduced to anything else, is not at all to exempt us from the various tasks involved in characterizing further the nature of this possibly irreducible knowledge. Some of these tasks are specific to the case of temporal and spatial thought. Others arise quite generally for realistic accounts of understanding. I give an illustration of each of these two types.

The realist's account of predications of other times and places, as I have characterized it, uses a notion of identity of property. The realist must say more about what such identity, and grasp of it, involves. It is immensely attractive at this point to combine the realist's account with Shoemaker's theory of the identity of properties (1984, 1998). Under this account, "properties are individuated by their causal features – by what contributions they make to the causal powers of the things that have them, and also by how their instantiation can be caused" (1998, p.61). It is sometimes an empirical matter which causal powers contribute to the individuation of a property. In finding out, empirically, by the sorts of means we discussed earlier, the causes or effects of rain, we find out what it is for another place or time to be one at which it is raining. Shoemaker's view about property-identity can ratify as rational our actual inductive and abductive practices in making judgements about other places and times. One task for the realist is to explicate this approach further; and of course to consider whether it is the only treatment that can make such sense of our grasp of property-identity.

A wider task for the realist emerges from reflection on some of the earlier arguments against Dummett's justificationism, and in particular the arguments about his conception of observation. If those arguments are correct, there is a generalizable, domain-independent lesson for the realist. The lesson is that if a mental state is mentioned, as an element of an identity-component in a realist's account of the understanding of some notion, there must be more to that mental state than it's merely being a subjective state if the explication in terms of identity is to succeed. What more is involved is a form of objective representational content in the case of the realist's account

of the grasp of spatial notions. If this additional element were not present in the state of perception, it would be entirely correct to object, in a Wittgensteinian spirit (though not to a Wittgensteinian end) that it is no easy thing to conceive of an unperceived object's being square on the basis of one's appreciation of what it is for a perceived thing to be square. Yet one does so appreciate it, all the same. The possibility of one's doing so is entirely dependent upon perception's having an objective representational content, upon which the identity-component of understanding can get a grip. The general requirement, of the presence of something beyond merely the status of a subjective state, if the identity-explication is to succeed, is a requirement that is realized in many different ways in the various domains in which an identity-explication of understanding is plausible. It falls to the realist as a task to explain how this requirement is realized in those various domains.

Finally, despite all the foregoing critique of justificationism, I note that there is a fundamental issue on which I am in agreement with Dummett. Dummett has always insisted that "the opposition between justification and truth cannot be resolved until we have decided what form our theory of meaning is to take" (114). I agree. I have opposed justificationism, but I have opposed it only by outlining another substantive theory of meaning or intentional content for the past-tense statements in question. That there is a nexus of internal relations between entitlement, meaning, content and understanding, and that it is only in the context of this system of relations that we can achieve philosophical understanding of any one of its elements, are propositions that are not contradicted, but are rather wholly supported, by the preceding arguments.

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