

Minds, Brains and Indexicals

Jane Heal

(Draft only, not for quotation)

1. Introduction

The aim of this paper is to understand and evaluate a proposal about the concepts expressed by such phrases as ‘is in pain’, ‘has such and such visual experience’, ‘feels cold’ and the like. For the sake of a convenient label, I shall call these ‘experiential concepts’. Reflection on the states described by these concepts leads many to talk of the existence of ‘qualia’, or ‘phenomenal properties’, and relatedly to sympathy with dualism. The proposal we shall consider aims to give an account of experiential concepts which both explains the appeal of such dualism but at the same time undermines it.

The proposal has two elements. The first is the idea that experiential concepts are in some sense ‘indexical’. The second is the claim that better understanding of this indexicality will undermine the appeal of dualism by revealing a fallacy underlying it and will thus correlatively strengthen the plausibility of a certain sort of physicalism. Versions of this proposal are (I believe) presented by Loar, Tye and Papineau.¹ These writers acknowledge the important influence of a suggestion by Nagel.² Others have also explored related themes.³

The first element of the proposal, viz. that some of our psychological concepts involve a distinctive sort of indexicality, is an idea with which I have a good deal of sympathy. I believe that we can describe and characterise things by indexical means.⁴ I believe also that this is a possibility which we exploit when we attribute actions and states with propositional content, e.g. sayings and thinkings.⁵ What Loar, Tye and Papineau seem to suggest is an analogous view of attributions of other, more obviously ‘experiential’ psychological states. Although the case for taking these attributions to involve indexical predication is, perhaps, more difficult to make than for propositional attitudes, and although some of the details of how it might go remain murky and contentious, still this is an idea to which I am very happy to give a favourable hearing.

So let us suppose that the first element of the proposal is correct. The next question is whether it has the implications for the defensibility of physicalism which are claimed in the second element of the proposal. (We need a quick label for the kind of physicalism which is in question. I shall call it ‘specific physicalism’, as opposed to ‘general physicalism’. The labels will be explained a little more below.) Proponents of the proposal believe that we are uneasy about specific physicalism, and hence find dualism attractive, because we fail to appreciate properly the indexical nature of our experiential concepts. Once we have that indexicality fully in focus, they suggest, our unease with physicalism and our attraction to dualism, both of which are rooted in a confusion, will be seen not to have force, to be based in illusion. But

¹ Loar (1991), Tye (1999), Papineau (2002)

² Nagel (1974) fnnt 11

³ Hill (1997), Bigelow and Pargeter (1990)

⁴ Heal (1997). I regret that I did not know of Loar’s article when writing this. Much of what Loar says about the existence of ‘type demonstratives’ and ‘recognition concepts’ seems to me helpful and suggestive.

⁵ Heal (2001), (2003) The proposals elaborated in these papers are far from wholly original. They have many roots and many similarities to ideas proposed by others. Fuller references are given in the pieces cited.

I shall argue that we cannot give an intelligible account of how this therapy is supposed to work and so the second element of the proposal is unacceptable.

In more detail the structure of the paper is as follows. The final few paragraphs of this introduction sketch the setting within which the debate arises and sections 2 and 3 continue to set the scene and help us to sharpen our conceptual tools. Section 2 does so by setting out the idea of indexical predication and its role in the attribution of speech and thought, while section 3 considers and defends the extension of this framework to include experiential concepts. Section 4 then explains the thinking behind the general strategy of invoking indexical predication in the defence of specific physicalism. It will conclude that, in broad outline, the strategy has some plausibility. It will also allow that it neatly evades (or at least appears to evade) certain potential difficulties.

So far so good then, for the proposal. But when we look in detail at how we are supposed to remove unease with specific physicalism, matters are not so rosy. Section 5 considers various lines of thought. They aim to provide a real dissolution of our resistance to specific physicalism, from the inside so to speak. This sort of dissolution would start from materials uncontroversially available to us all, whether or not we are initially sympathetic to specific physicalism and would end by making us entirely happy with it. The section suggests that none of the lines explored can deliver this sort of dissolution. Section 6 examines an alternative plan, which aims not to dissolve our resistance to specific physicalism from the inside but rather to convince us from the outside that the resistance is likely to be a muddle, even though we do not succeed in dissolving it. The conclusion is that this strategy also fails.

I turn now to some very broad-brush remarks about the background to the discussion. Many of us can be got to share, or at least to sympathise with, two seemingly inconsistent intuitions. On the one hand we feel an uneasiness with metaphysical dualism and a consequent attraction to the only other option available at this level of generality, viz. some kind of physicalism. The problematic dualist idea is that of there being extra kinds of stuff or force occupying space and time, over and above those discoverable by the natural sciences and needed to explain what non-living and non-sentient things consist of and how they behave. Dualism of this kind has become particularly difficult to accept with the advance of natural science and especially with our increasing conviction of the completeness of physics.⁶ A vivid way of putting this general, highly programmatic, physicalism starts from the idea of God creating all and only the things – that is the stuffs, objects, forces, structures, properties, powers etc. – sufficient for the existence of the non-living, non-sentient world. Suppose that he does this and that as a result a universe comes into existence and unfolds through time so as to contain the kinds of intricate structures which are human bodies, behaving, moving, making noises etc. as they do. Then, says this physicalism, the psychological, in all its importance to us and its centrality to why and how things happen, comes along for free. It must already be there in the complexity we have postulated. This is because there is no place to put in any extra which could be of interest. Given the completeness of physics, no extra could make any difference in the public world of actions and events, of which people and their feelings and thoughts are a part. In another vivid idiom, the idea of zombies, physical duplicates which move and talk in every way just like us but are without something important called ‘consciousness’ or ‘experience’, is nonsensical.

⁶ For a helpful discussion of this see Papineau (2002) Appendix.

Many find it natural to suppose that this general physicalist thought implies the possibility of identifying psychological happenings with specific physical happenings. They are committed to what we shall call 'specific physicalism'. Specific physicalism asks us to focus on particular items described in psychological terms and to identify them with particular items described in physical terms. ('Items' here is meant to be as non-committal as possible about ontological category. So it covers individuals, events, processes, properties, states, facts, etc.)

Here is an example:

(A) The fact reported by 'Mary has a visual experience as of a broadening vertical band of light before her' is identical with the fact reported by 'Mary has events of neural or functional character C occurring in her brain'.

Other ways of making specific physicalist claims are also found. For example some say that pain is identical with a certain brain process. Some say that mental events are identical with physical events. Some talk of states of persons having neural and phenomenal properties and suggest that these properties could be identical. These ways of talking all involve nominalisations (talking of pain as a thing, talking of events as particulars, talking of states as entities which themselves have properties), the commitments of which are not always entirely clear. One possibility is that these locutions are just shorthand ways of making the same sort of claim as (A). But another is that they import more content. Insofar as this is the case, the locutions could embroil us in complicated speculative metaphysics which it is good to steer clear of, if we can. So in what follows we shall try to stick with claims of the form of (A), viz. those involving whole sentences and facts. Even with these we do not avoid contentious metaphysics completely. (What are the identity criteria for facts? We shall need to touch on this briefly below, in section 4.) But at least using whole sentences keeps us fairly close to everyday ways of talking.

Now for our second intuition, that of the falsity of specific physicalism. It is when contemplating claims like (A) that it can be evoked. We find such claims extremely puzzling. We are inclined to exclaim 'How could it be that these two reports are true in virtue of the same fact?!' It is worth being careful here. What is expressed in these exclamatory questions is not, at least at first sight, an intuition of the falsity of specific physicalism. Rather it is extreme puzzlement, an inability to get our minds round the sort of identity claim offered in (A). But many of us can, without too much difficulty, be parlayed into interpreting this puzzlement as an awareness of distinctness, an awareness that there must be something other than a brain process going on when Mary has a visual experience. Another familiar way of putting this is that we can be got to think we perceive an unbridgeable 'explanatory gap' between what is reported in the two claims. And this thought may then be given dialectical teeth and a metaphysical dualist conclusion by arguments such as those of Kripke and Jackson, by the discussion of inverted spectra, absent qualia and so on.⁷

The aim of the proposal we are considering is to weaken or undermine this second intuition and hence to remove resistance to specific physicalism. The proposal is that the appeal of the second intuition will fade, that we shall recognise something fallacious underpinning it, when we appreciate the real logical shape of the psychological concepts involved. I turn next to sketch a framework within which this suggestion can be articulated.

⁷ For a way into the voluminous literature on these issues see the useful collection edited by Block, Flanagan and Guzeldere (1997) especially the selections in Sections II, VI, VII, VIII and IX.

2. Indexical predication, speech and thought

Consider events of the following form: an utterance together with the occurrence of a specimen or performance of some kind. For example:

(1) My curtains are coloured thus {a specimen of red material}

or

(2) Mary sang thus {a singing by me of Pop Goes the Weasel}.

(In what follows I adopt the following notational convention. When presenting an indexical claim I use curly brackets to provide a space in which will appear some linguistic expression. The expression is a stand-in for that part of the context of the utterance which plays a significant role in completing the communicative vehicle. The expression is designed to enable the reader to grasp enough about the context to understand what claim is made and how.)

What is the role here of ‘thus’ and the item in the context it connects with? The event as a whole presents a complete vehicle of communication, which is formed by words, in some way complemented by the specimen or performance. But the specimen or performance, as an individual occurrence, is not itself referred to in the utterance. So (1) is importantly different, in logical and epistemological ways, from

(3) My curtains are the same colour as this piece of material {a specimen of red material}.

And (2) is similarly different from (4)

(4) Mary duplicated this performance {a singing by me of Pop Goes the Weasel}.

Nevertheless the role of the specimen in (1) or the performance in (2) is crucial. Each is there to make available for predicational attribution the predicate correlate (the property, colour, manner, action or whatever) which the remark as a whole ascribes to the subject of the remark. It makes it available by instantiating it in the context of the utterance and so making ‘thus’ able to latch on to it. An indexical latching on to a predicate correlate in its context, and so contributing it to the semantic content of the remark, is the hallmark of indexical predication.

The idiom using ‘thus’, as in (1) and (2), is not the only way of effecting indexical predication. We can also say

(5) My curtains are this colour {a specimen of red material}

or

(6) Mary sang this {a singing by me of Pop Goes the Weasel}.

The shift from ‘thus’ to ‘this’ marks our willingness to think in terms of tunes or colours. Some will take it that what we have here is indexical identification of a ‘universal’ – or at least of some entity in the broad category of non-concrete items. Nominalists might not be so happy with that and would seek to explain away the locutions. Many familiar philosophical puzzlements arise at this point. My purpose in mentioning them here is only to set them on one side. For our purposes the important thing is the similarity of (1), (2), (5) and (6) and their difference from (3) and (4). The indexicality of (1), (2), (5) and (6), whatever we think of the metaphysics of predication, has to do with characterising my curtains or Mary (i.e. has to do with saying how they stand vis a vis universals or abstract entities, if such exist). And so for our purposes (1), (2), (5) and (6) are all indexical predications.

Indexical predication is a useful resource when the vocabulary of our language does not provide standard non-indexical words for the properties (colours, manners, actions, or whatever) we wish to ascribe, but where we do have, or can at will produce, specimens of them. Indexical predication will be particularly useful in enabling us to talk and think about intricate human performances, as in music, where we have a know-how of producing them but lack explicit analytic vocabulary for specifying them in detail. Suppose, for example, that I am familiar with the tune Pop Goes the Weasel in that I can sing it, but that I do not know its name and cannot describe it in technical musical terms. Then (2) or (6) is the obvious resource for explaining to you what Mary did.

Talking and thinking provide other examples of such intricate human performances. So an attractive suggestion is that we can and standardly do represent them using the resources of indexical predication. So we should see an utterance of

(7) Mary said that the Earth moves

as an indexical predication which attributes to Mary a performance the semantic character of which is made available to the hearer by being instantiated in the production of the complement clause.

Analogously if I think

(8) Mary believes that the Earth moves

what I do is exercise my concepts of Mary and believing and an appropriate indexical, and then complement this by myself doing some actual further thinking, constituted by my exercising my concepts of the Earth and movement. So the thought overall has roughly this structure:

(9) Mary believes thus {a thinking by me that the Earth moves}.⁸

So much then, in quick outline, for the idea of indexical predication and its application to the reporting of speech and thought. Before looking at whether and how the framework might extend to experiential concepts it is worth noting that we can already see an interesting link with some of the ideas in the proposal.

⁸ Clearly these ideas are related to those of Davidson. But they are importantly different in seeing ‘that’ clauses as means of indexical predication rather than indexical reference. Many other philosophers have had similar ideas. Fuller development and further references can be found in Heal (2001, 2003).

All three proponents agree with dualists that Jackson's familiar black-and-white Mary thought experiment shows something significant.⁹ What it shows, they say, is that there is a way of thinking about an experiential state (for example seeing red) which is available only to someone who has been in it. Moreover, they agree, this way of thinking about it is central, in that one who cannot exercise it lacks an important insight into the real nature of the state.

The tools we now have to hand enable us to see that the general idea invoked here may make sense and be important. Let us consider Tye's version of it. He puts it by introducing the idea of states which are 'perspectively subjective'.¹⁰ A state S is perspectively subjective if it 'is such that fully comprehending S, as it is essentially in itself, requires adopting one particular point of view or perspective, namely that provided by undergoing S'. The general idea here is that of a property, such that instantiating it is required for thinking about it with full understanding.

This is, on first presentation, a distinctly strange idea. But it may that with belief, and in the light of the above theory of how we attribute it, we have an example which shows the usefulness and applicability of Tye's notion. Consider the predicate 'believes that the Earth moves' and the state it describes. What is required to 'fully comprehend that state as it is essentially in itself'? Let us suppose for the moment that it is making judgements of the shape of (9). Can we say that ability to make such judgements amounts to having a distinctive perspective on the state, a perspective which is available only to one who has undergone or is undergoing the state? First re 'believes' it seems plain that anyone who exercises the concept 'believes' will be a believer. So, in a rather thin sort of way, the condition is satisfied as far as that element of (9) is concerned. And with 'that the Earth moves' the idea is fully at home. One who thinks as in (9) entertains the content 'the Earth moves', just as a believer would. So, in summary, one who thinks about belief as in (9), can do so only insofar as she shares significant properties with the one she thinks about. Her thought about the believer comes from a distinctive perspective, that of one who does herself have beliefs and does herself think about the Earth and movement.

But were we right to suppose that 'fully comprehending believing that the Earth moves as it is in itself' requires thinking of it as in (9)? In favour of saying 'yes' is the idea that thought is essentially representational. Hence (one might say) any full comprehension of it must enable appreciation of what it represents and (9) is exactly what is needed for this purpose. Another (more controversial) reason for saying 'yes' centres on suggested links of thought and rational deliberation. Some think that potential role in rational deliberation is a further essential feature of thought. If this is right, then thinking as in (9) is what puts one in the best position to appreciate what inferences a belief might support and so is what is called for by full comprehension.

These brief remarks give some sense of why one might agree that belief is a perspectively subjective state. Central to the thought is the idea that belief is to be represented by indexical predication, where the specimen state is a state of oneself.¹¹ Could it be then, that Tye's views on our concepts of experience (and those of Loar and Papineau as well) can be helpfully elucidated by invoking this sort of indexical predication? It is to this idea that we now turn.

⁹ Jackson (1986).

¹⁰ Tye (1999), p. 708

¹¹ See Heal (2003).

3. Indexical predication and experiential concepts

The aim of this section is not to provide a fully worked out account of why application of experiential concepts should be taken to involve indexical predication. Rather the aim is to show that it is plausible, or at least not obviously wrong, to see things this way.

Let us take as our initial target this thought:

(10) Mary has a visual experience as of a broadening vertical band of light before her.

If the indexical predication proposal is correct then what goes on when I have such a thought is something like this: I exercise my concepts of Mary and of visual experience and also some indexical concept. Then, in the space which the indexical latches on to, something experiential occurs in me, viz. a representation, in reality or imagination, as of a broadening vertical band of light before me. An essential element of my thinking about Mary is my instantiating the very experiential feature which I attribute to her. So the shape is:

(11) Mary experiences visually thus {a visual experiencing by me as of a broadening vertical band of light before me}.

Is this a defensible story? Suppose first that I am actually having a visual experience as of a broadening vertical band of light before me. It seems clear that in this case I can use indexical predication to represent to myself how it is with Mary.

Suppose, however, that I am not actually having a visual experience of that kind. Then what the indexical will latch onto can be at best some visual imagining by me. Is such an imagining a 'visual experience' in the sense needed? Full discussion of the nature of images and sensory imagination is beyond the scope of this paper. But it is clear that many of us are entirely happy to say 'yes – visual imagining is a distinctive experience, like seeing, only much less rich, vivid and intense'. For purposes of this paper I shall take it that this view is correct.

The fact that in imagination, conceived this way, we have, at best, a 'faint copy' of actual experience does not present a difficulty for the indexical proposal. I may successfully and truthfully represent someone's movements by thinking 'She gestured with her arms thus {a gesturing with my arms by me}' even when the gesturing by me is sketchy or incomplete. To put things in terms of universals, the gesturing can do its job as long as, through its nature, it gets the right universal into the truth conditions of the thought. Being a sketchy or outline exemplar of the universal will do.

Applying the account to bodily feelings, for example pain, produces the idea that thinking

(12) Mary feels a pain in the toes of her right foot

has a structure something like this:

(13) Mary feels thus {an imagining by me, which is somehow pain-like in nature, as of a pain in the toes of my right foot}.

This may look less plausible. So let me fill in the description: Mary feels as if she is having the toe nails on her right foot pulled out. I report that I found that I found that unpleasant to write – and with a kind of unpleasantness naturally expressing itself in grimacing and wincing and centred on awareness of the toes of my right foot. So the description ‘an imagining of a somehow pain-like nature’ is not wholly inappropriate to what went on.¹²

Some further facts about imagination need to be borne in mind and are helpful to the proposal. Imaginative enterprises can be undertaken at all levels of engagement, from the most superficial to the most demanding. To understand that Mary thinks that the Earth moves, I need not myself meditate deeply on what is involved in the Earth’s moving. It is enough if I get to be in a position to activate my grasp on the concepts of the Earth and movement, if I need to. It is enough, in other words, that I am located at the relevant starting point for further reflection. Similarly with my thinking about Mary and her perceptual experiences or bodily feelings. I may do little more, in understanding (10) or (12) than nod in the direction of imaginative recreation of her state. The experiential element of what occurs in me may be so vestigial as to be virtually non-existent. But, as with the case of thinking about beliefs about the Earth, what is important is that I am poised to exercise an ability to engage more deeply in a certain distinctive way. The proposal requires that such deeper engagement, in the case of experiential concepts, will include imaginings which have some degree of experiential vividness and so are nearer to what occurs in Mary. And this idea has a good deal of plausibility.

Is it right to assume (as I have so far) that Loar, Tye and Papineau do have a common idea and that what is said above is a fair account of the first element of it? Here are some of the phrases and claims, which suggest their views are at least closely related to what has been outlined in sections 2 and 3. Loar talks about ‘phenomenal concepts’ (i.e. the ones of feeling and experience we want to elucidate) as being ‘type-demonstratives’ and having the form ‘x is one of that kind’. He rejects the Lewis ‘ability’ response to Jackson-type dualist arguments¹³ but thinks that what we may call the ‘Lewis abilities’ (viz the ability to identify the experience in oneself and the ability to imagine it) are important components of the possession of these particular concepts. He talks also of the use of images to ‘focus’ thoughts of an identifiable kind on that kind. ‘One can focus attention on a phenomenal quality of a cramp feeling by way of a token cramp feeling’.¹⁴ Tye insists that phenomenal concepts are ‘perspectically subjective’ and as we saw at the end of section 2, this fits with the articulation offered here. He too stresses the link between possessing phenomenal concepts and Lewis abilities and he remarks that exercise of the concepts involves having, or being poised to have, images.¹⁵ Papineau offers more detail about the sort of syntax and semantics he is assuming than Loar or Tye and what he says seems to indicate that he is operating an indexical predicate model. Thus he says explicitly that for him phenomenal concepts have the form ‘the experience: ---’ where the gap may be filled by some perception or imagination. Following from that he elaborates a ‘quotational model’ and in the course of it says such things as ‘[U]ses of phenomenal concepts do not work by pointing directly to some past experience; rather they ‘quote’ a current act of perceptual re-creation, and thereby refer to that experience which appropriately resembles that quoted exemplar.’¹⁶

¹² Cf Tye (1999) p.712 fnnt 12.

¹³ Lewis (1990).

¹⁴ Loar (1991), pp. 600, 604, 607.

¹⁵ Tye (1999), 708-12.

¹⁶ Papineau (2002), ch. 4, esp. pp. 114ff.

It may be that despite these resonances and suggestive claims, the account I have given misrepresents the views of Loar, Tye and Papineau. But full discussion of their views, with canvassing of alternative interpretations, would take us too far out our way. So in what follows I shall assume that we have got the first part of the proposal correctly articulated. We turn now to consider whether the understanding of experiential concepts outlined in sections 2 and 3 does offer materials for defending specific physicalism and weakening the appeal of dualism.

4. Concepts, properties and the defence of physicalism

There are plenty of truths which on first presentation are puzzling and not easy to accept, but which reflection can make more intelligible. For example, people may find it strange when told that it is the rotation of the Earth rather than the movement of the Sun which explains day and night. But we can be got to see that the facts which seem to point to an unmoving surface for the Earth (no wind, no sense of movement etc.) are not conclusive, and that things would in fact look and feel just as they do even if the Earth rotated and the Sun stood still. When we appreciate this, then our sense of bewilderment and resistance may well vanish. Another case is that of the Gambler's Fallacy. Many of us fall for the fallacy and say 'It must be that, after this run of nine tails, a head is more likely than a tail on the next toss of this coin. A run of ten tails is highly unlikely!' But most of us can also be got to see that there is something suspect about this thought, since it is precisely the fairness of the coin which makes the run of tails unlikely – and if the coin is fair then head and tail are equally likely on the next toss. We have made the error of not taking into account that fact that most of the improbability of the ten-tail scenario has already occurred by the time we are up to nine tails. Again we can be persuaded of this and so come to embrace without any unease the idea, which at first seemed so absurd, that heads and tails have an even chance on the tenth toss.

The aim of the proposal, in its second element, is to do something similar for specific physicalism, to make it more intelligible or acceptable. Here is an outline of how it hopes to persuade us that our bewilderment and resistance to such physicalism is rooted in confusion. I shall present it in two parts, (I) and (II).

It starts by emphasising a general contrast between conceptual/epistemological matters and ontology. Defenders of the proposal say here:

(I) There is no general argument from conceptual difference to ontological difference, because different concepts can sometimes provide alternative handles on the same property. Experiential concepts and physical concepts are indeed different and we should therefore concede something to dualists. But we should not conclude from this conceptual dualism to an ontological dualism. Instead we should take it that experiential concepts provide an indexical handle on what the physical concepts specify non-indexically.

Then it moves on to diagnosing our resistance to seeing things this way:

(II) We have not hitherto been happy to recognise this truth because we have been misled by the conceptual dualism. Lacking the insight that experiential concepts are indexical, we have misinterpreted the contrast, have been (unnecessarily) bewildered by claims like (A), have had the (mistaken) sense that there is an explanatory gap and have been tempted to dualism.

But these feelings and intellectual impulses are rooted in illusion, which we can dispel by reflection on the indexicality of experiential concepts.

How should we assess this? Setting out (I) needs a little care. Some have been tempted to express it by saying that we should recognise for predicates a distinction analogous to the sense/reference distinction for referring expressions.¹⁷ But this way of putting things threatens complications. Certainly we may apply the sense/reference distinction to predicates, by taking the reference of a predicate to be its extension. This, however, is not what is meant by those invoking the sense/reference distinction in our current context. Their assumption is rather that predicates can be thought of as referring to properties (not extensions) and that properties can themselves, like particulars, have (further) different properties. But we need to do philosophical work to show that there is a point in treating predicates as ‘referring’ to properties, conceived in this way. There is no general agreement on whether it is worth doing this work or how to do it. It is a daunting thought that we need to engage with this controversial metaphysics in order to advance our discussion. There is, in addition, a further potential pitfall for specific physicalism in the strategy of saying that there are properties which may themselves have different properties and so present themselves to us in different ways. It is that allowing in these properties of properties hands the initiative back to the dualist.¹⁸

One attraction of the approach via indexical predication is that it provides (or seems to provide) a way of bypassing these particular controversies and difficulties. Consider the utterances ‘The brooch is hexagonal’ and ‘The brooch is this shape {a hexagonal specimen}’. If ever there is to be a case where two utterances with different meanings (in some intuitive sense) can be allowed to report the same fact (again in some intuitive sense), then surely this is it. So if we can persuade ourselves that the case of experiential and physical concepts is an example of this comparatively uncontentious sort of conceptual contrast then we can neglect further complexities about the identity conditions for properties and facts. It is also clear that we do not lay ourselves open to dualist counterattack. (On the other hand, if we cannot persuade ourselves of this, then the problems with what we mean by property and fact identity will recur in full force.)

So (I) is right in pointing out that the move from ‘These sentences contain predicates with different meanings’ to ‘These sentences report different facts’ is not always valid. It is also right in suggesting that some contrasts of indexical and non-indexical concepts provide persuasive cases where the move would fail. And we have already agreed (in section 3) that experiential concepts are indexical. Thus far the proposal stacks up. It has established in schematic form the coherence of the view that experiential and physical concepts might relate as indexical and non-indexical ways of specifying the same feature of the world.

Defenders of specific physicalism have many familiar considerations to cite in favour of their view. They may for example point to the explanatory role of the psychological, the unattractiveness of allowing overdetermination and so forth. But sceptics about specific physicalism are not convinced by these. The interest of the line suggested in (II) is its promise of explaining why the sceptics are not convinced and of showing that their resistance is

¹⁷ Papineau, (2002) p. 49

¹⁸ Someone who has noted the importance of this in the context of the debate over physicalism is White (1986). The initiative mentioned here is energetically pursued by Chalmers in his arguments for dualism. (Chalmers 1996, ch 4).

unreasonable. Compare the position on the movement of the Earth or the Gambler's Fallacy. It is one thing to give the evidence in favour of the Earth rotating or for an even chance of a tail on the next throw. It is another thing to show the flaws in the thought processes which lead to sympathy with the contrary view. If we can only do the former and not the latter we remain confronted with a paradox, viz. seemingly persuasive considerations in favour of incompatible positions. To get to a stable and non-paradoxical position we need to undermine the appeal of the false views more directly. If we can expose the confusions which give illusory appeal to the false views then we allow the arguments in favour of the right views to operate with full effectiveness.

It is at this point that we come to (II).

5 Indexical thinking and illusion

It is admitted on all hands that specific physicalist claims, like (A), are liable to seem bewildering and to arouse resistance. The claim of (II) is that understanding the indexicality of experiential concepts provides a way into thinking about the issue which will diminish this bewilderment and resistance. But how exactly is this to work?

This section considers two lines of thought. In all probability neither of them represents the central suggestion in the proposal. But it is worth clarifying them, if only to set them on one side. We shall come closer to the proposal in the next section.

The two lines of thought to be considered now have in common that they are ambitious. They aim to unmask the supposed illusion, and to dismantle it completely, by starting from uncontroversial ideas and building on them by uncontroversial moves. If they succeed then we shall end up as happy about specific physicalist claims as we are about taking the Earth to rotate or the chances of a tail next toss to be evens. It is indexical predication which is the crucial new ingredient to be deployed in (II). So these two ways of trying to understand (II) start from reflecting on indexical predications.

Consider indexical thinking of this form:

(14) Mary is thus {an occurring in my brain of events of character C}.

According to proponents of the proposal, it is thinking of this shape which goes on when I think that Mary has a visual experience as of a broadening vertical band of light before her. They must hold this, since it is their claim that what goes on when Mary has a visual experience as of a broadening vertical band of light before her is nothing other than the occurrence of certain brain events in her, say events of character C, and it is also their claim that experiential concepts are indexical.

(14) presents one way in which I might think about how it is with Mary's brain, viz. indexically by using my own brain as a specimen. But there are other ways of thinking about how it is with her brain. For example I might think something like this:

(15) Mary has events of character C occurring in her brain.

If we could show how illusions might arise by juxtaposing thinking of the forms (14) and (15) it would indeed be powerful and interesting. This is because this line of reflection starts from ideas – of a complex physical state and of the possibility of representing it both indexically and non-indexically – which should be admitted by everyone to be unproblematic. If we can see how careless or unreflective deployment of these unproblematic materials could lead to muddle and dualist illusion, then that would clearly be very illuminating.

So let us reflect on (14). What psychological configuration are we to brood on when we think about it? To see the options here we need to understand a bit more of the workings of indexical predicates. The presence of a given predicate-correlate in the context of an indexical-predicate token is not by itself enough to enable that predicate-correlate to help fix the truth conditions of the claim in which that token occurs. It is also required that the indexical ‘latch on’ to the predicate-correlate. ‘Latching on’ is the label for whatever puts the thinker into an appropriate relation to an element in her environment to enable that element to figure in the content of her thought.

In the sort of example given by

(1) My curtains are coloured thus {a specimen of red material}

the latching on is mediated by perception and, very probably, a demonstration as well. If someone is to understand (1) she needs to perceive the relevant piece of material, she needs to perceive it as the right colour and she needs to appreciate that what is attributed to the curtains is the colour she is attending to perceptually.

So attentive perception provides one kind of appropriate relation. But we should not think that it is the only one or take for granted that it is present in every case. Consider again

(9) Mary believes thus {a thinking by me that the Earth moves}.

It is implausible and unnecessary to apply the perceptual/demonstrative model here and say that when I think as in (9) I must have perceptual awareness of my thoughts or inwardly point at one of them.¹⁹

To see why this is so it will be helpful to think of referential indexicals and remind ourselves of the difference between those which are ‘demonstrative’ and those which are ‘pure’. ‘That’ is typically a demonstrative indexical, since it is used in the context of a perceptually presented array of possible referents, and it needs supplementation by a demonstration, or something of the kind, to help it fix on one rather than another. But some referential indexicals can latch on to their referents without benefit of either perceptual presentation or demonstration. This is because the rule governing their use links any token in a context to its semantic correlate in that context by a function which is certain to fix on exactly one appropriate referent. Such a function will operate to deliver that referent without need of supplementation by perception or demonstration. For example, a token of ‘I’ refers to whoever produced it, whether or not that person is presented to him or herself in perception, or proprioception. Hence ‘I’ is a pure indexical.²⁰

¹⁹ Also it has unfortunate consequences. For more on this see Heal (unpublished).

²⁰ Kaplan (1989).

An analogous distinction can be drawn for indexical predicates. And in the light of it thoughts of the shape of (9), can be seen to involve pure indexical predication. Let me spell this out a little more clearly. If the whole thought is well-formed, there will be only one embedded thinking in the appropriate location. So the indexical can latch on to it without need of more cognitive activity. All I need to do is the thinking about the Earth and movement, in the right juxtaposition to the thinking about Mary and belief. Moreover, and very importantly, what the indexical latches on to is something which is already a thinking by me. Hence it is already the case that it contributes to fixing the content of my thoughts. So, unlike with the colour in (1), there is no need of further cognitive engagement with this thinking to enable it to play a role in fixing what I think. I do not need to think that I think it, as well as just thinking it, in order for it to determine what thinking I attribute to Mary.

Let us now return to the question of whether we can substantiate (II) by brooding on (14) and (15). Is the indexicality of (14) pure or perceptual/demonstrative? The suggestion that it is pure is very difficult to understand. Presented just baldly it offers no intelligible account of how the indexical latches on to the complex physical property or how the instantiation of that property could contribute to the content of my thought, let alone how it could contribute the content about a broadening vertical band of light.

It may be that there is a supplementation, namely acceptance of the truth of specific physicalism, which would make the proposal less bald and (up to a point) more intelligible. Consider (11):

(11) Mary experiences visually thus {a visual experiencing by me as of a broadening vertical band of light before me}.

Acceptance of specific physicalism would licence the substitution of (11) for (14). And with (11), it seems more plausible that the indexical could be pure. This is because with (11) the item latched on to is already in consciousness, already in some way contributing to the content of the mind.

But this whole line of thought is not one which is allowed on the current ambitious strategy. Willingness to accept specific physicalism is to be the upshot of the reflection. It is not something we can just help ourselves to.

So let us look at the other possibility, taking the indexicality to be perceptually based. And let us start with another example of perceptual awareness of a complex physical property. Suppose that part of my body has some distinctive physical configuration, for example my long hair is in two plaits, which have themselves have been tied into a granny knot. I may now describe someone else, say Mary, in either of two ways. I may say, non-indexically, that her hair is in two plaits tied in a granny knot. Or I may say indexically and while looking at my own hair, 'Mary, as to her hair, is thus {my hair with its plaits and granny knot}'.

Does the availability of these two concepts have any illusion-generating potential? Am I at all tempted to suppose that there are two properties here? Of course not. And this is so, even if my hair presents the configuration to me in a distinctive sort of gestalt which I cannot unpack a priori in such a way as to see its equivalence to the topological mathematical description of the plaits and granny knot. Although I cannot untangle my gestalt, I am not tempted to suppose that it is something other than a knot-like configuration which I am apprehending.

Nothing about the indexical grasp I have on the hair arrangement tempts me to get its ontological category wrong and hence to find unintelligible the identification of it with a topological configuration.

One may protest that this case is not at all the kind we should be considering. Experiential concepts, let us remember, are ‘perspectively subjective’. This means that the specimen which is indexically invoked, the property bearer, must be oneself. The case of the hair clearly does not satisfy this condition. Someone else with the same hair arrangement would do just as well as an exemplar for attributing this property indexically.

So here is another case. Suppose I feel my teeth with my tongue and note a particular configuration of them. This way of thinking of this tooth configuration is one I can deploy only when sensing my own dental condition with my own tongue. We cannot feel others’ teeth from this angle in this way (not even if we are dentists or lovers). So this indexical concept is ‘perspectively subjective’.

Again it is clear that this has no illusion-generating potential. It makes no difficulty for my accepting the idea that what I attribute indexically (as when I think ‘Mary, as to her teeth, is thus {my own tooth configuration as felt by my tongue}’) could be described in physical terms, via talk of canines, incisors, angles and so forth.

A third case is that of proprioception, which makes me aware of the configuration of my limbs, and such things as the condition my muscles. In imagining that the latching on to my brain condition is perceptual what we have done, in effect, is imagine that something like proprioception extends to provide awareness not only of the configuration of the limbs but also of the configuration of the brain. Would the existence of this allow us to understand why specific physicalism is so bewildering? It is apparent, I believe, that it would not. Tooth or limb awareness do not give rise to bewilderment or illusion. Why should brain awareness be so different?

We have pursued the perceptual model in various versions, offering kinds of perception which are progressively more inward directed and perspectival. But none of them yields any insight into why bewilderment and illusion might be generated by indexical thinking based in such perceptual awareness of a complex bodily state. The problem with spelling out (II) on these lines is quite general. The grasp on a property which is given us by perceptual awareness (whether in vision, touch or proprioception) may be incomplete, lacking in detail, impressionistic, perspectival. But none of these features of perception, or of the kind of information it delivers, gives any reason to suppose that it is liable to mislead us about the ontological category of what we are aware of.

Perhaps then, this line of thought does not represent what the defenders of the proposal had in mind. And indeed there is strong reason to think that it cannot be what they intended.

Insofar as there is any phenomenology in the perceptual situations described above, it exists in virtue of the perceptual awareness of what is indexically represented. It is my awareness of my hair as I look at my plaits, or my awareness of my teeth as I feel them, or my awareness of my limbs in proprioception, which is a candidate for having phenomenology. We do not think that having one’s hair or teeth or limbs configured thus and so, are themselves states which bring phenomenology with them. These configurations could exist without being perceived (if I am deeply asleep, for example) and would then not give rise to anything

experiential in me. But what we are trying to get light on is how there could be a different sort of physical configuration, one which, quite apart from whether there is any higher order representation of it, could itself constitute the existence of an experiential state. To put this another way, the defenders of the proposal require that what is indexically latched on to is itself already an experience of mine. It is not a (mere) potential object of experience but something with its own experiential nature. What occurs in the curly brackets (so to speak) must be something which would be an experiencing of mine, even if it did not occur framed by my exercising concepts of Mary and of her visual state. Perhaps by being so framed it becomes intensified or in some other way modified as an experience.²¹ Perhaps it becomes ‘conscious’ in the sense where ‘consciousness’ is spelled out in terms of higher order thought or first person authority. But it is already ‘conscious’ or ‘experiential’ in the sense which is our primary concern, viz. involving ‘what it’s like’ or ‘phenomenology’.

So we were much closer to the spirit of the proposal in our first attempt to interpret (14), namely as a pure indexical. But, to repeat, this interpretation of (14) only begins to make sense if we already find specific physicalism intelligible and hence are willing to substitute (11) for (14). Our problem was to see how the physical and the experiential could be intelligibly related, as they are said to be in (A). All that has happened in our being told that we may equate (14) with (11) is that the specific physicalist tub has been thumped again. But nothing has been said which should make us happier to thump it ourselves.

Let us now look briefly at another option. As we noted at the start of this section, the indexicality of experiential concepts is the new ingredient in the debate which is supposed to help us unravel our muddle. And what we agreed on earlier in section 3, what defenders of the proposal themselves stress, is not merely that experiential concepts are indexical but further that the indexically used specimen is an instance of a mental property. (That is in effect what has emerged in our discussion of (14) and (11).) As Papineau puts it ‘Phenomenal concepts are thus a peculiar species of indexical term. They can only be formed using exemplars from the thinker’s own mind.’²²

So perhaps it is merely more consideration of

(11) Mary experiences visually thus {a visual experiencing by me as of a broadening vertical band of light before me}.

which is we need to make specific physicalism less bewildering?

The problem with seeking to fill out (II) by this route is that indexical predication is a useful way of engaging with many aspects of the world and its use is consistent with many different metaphysical natures and statuses for what we represent by its means. There is therefore no quick argument from the indexicality of experiential concepts (of the kind instanced in (11)) to the truth or falsity of any particular metaphysical position on the mental. The indexicality of experiential concepts, just as such, is *prima facie* neutral between dualism, specific physicalism and other possible metaphysical positions. And since it does not directly support specific physicalism, whatever help it is to give to that position, (e.g. by undermining supposed arguments against it) will have to come in some more complex and indirect way.

²¹ Papineau (2002), p. 120

²² Papineau (2002) p. 124 (my italics).

In summary then, the claim of (II) is that we can diminish our temptation to dualism and our resistance to specific physicalism by reflecting on the indexicality of experiential concepts. We have tested that claim by engaging in such reflection, in one case by starting from the form exhibited in (14) and on the other by starting from the form exhibited in (11). Neither route has yielded what was promised. It is clear that we can think indexically about the physical, as with the perceptual/demonstrative versions of (14). It is clear that we can think indexically about the experiential, as with (11). But we are no nearer understanding how the experiential could be the physical, why we find claims like (A) so bewildering and how our bewilderment might be a mere muddle.

So perhaps we need to look at a more complex but less ambitious strategy.

6 A third way?

In the case of the stationary Earth or the Gambler's Fallacy we can achieve particularly satisfactory and thorough exposures of the initial illusions – that the Earth cannot be rotating, that the probability of a tail next time must be more than evens. They are satisfactory and thorough because they work without our needing to entertain at the start what we find so bewildering. Instead we begin from different and uncontentious ideas (what it is like to be on a large moving object, the probability judgements one can make as one moves through a series of tosses), development of which by intelligible steps then works to produce the enlightenment we want. The upshot is that the illusory appeal of the false statements evaporates.

We have not so far found an analogous cure for the bewilderment induced by specific physicalism. There is however a third interpretation of the proposal which we need to consider. Perhaps the proposal says this:

If specific physicalism were true then things would still appear to us just as they do, in particular we would be liable to find it bewildering and to find dualism tempting because of certain cognitive illusions we are prone to. There are many considerations which already tell in favour of specific physicalism (the explanatory role of the psychological, the drawbacks of allowing overdetermination, etc.). Therefore specific physicalism is the best explanation of our total situation, since it accounts for both these familiar considerations and also for the bewilderment and temptation. Therefore specific physicalism is probably true. And given that it is true, then our bewilderment and temptation are the upshot of illusion. We should accept that this is the position and endorse specific physicalism, even if the bewilderment has not been completely dispelled or the temptation to dualism been removed.²³

Crucial to this account is the claim that we would find specific physicalism bewildering and be tempted to dualism, even if it were true. Loar's view about the genesis of the muddles is as follows: 'The problem of the explanatory gap stems from an illusion. What generates the problem is not appreciating that there can be two conceptually independent 'direct grasps' of a single essence, that is grasping it demonstratively by experiencing it, and grasping it in theoretical terms. The illusion is of expected transparency: a direct grasp of a property ought to reveal how it is internally constituted, and if it is not revealed as physically constituted,

²³ Papineau says that his aim is to free us from the grip of a dualist compulsion.(2002, p3). But by calling it a 'compulsion' he acknowledges the near impossibility of achieving the aim.

then it is not so. The mistake is the thought that the direct grasp of essence ought to be a transparent grasp, and it is a natural enough expectation.’²⁴

Papineau offers a slightly different suggestion. He says ‘[T]here is an intuitive sense in which exercises of material concepts ‘leave out’ the experience at issue. They ‘leave out’ the pain and the technical phenomenology, in the sense that they don’t activate or involve those experiences. Now, it is all too easy to slide from this to the conclusion that, in exercising material concepts, we are not thinking about the experiences themselves. After all, don’t the material modes of thought ‘leave out’ the experiences, in a way that our phenomenal concepts do not? And doesn’t this show that the material concepts simply don’t refer to the experiences denoted by our phenomenal concept of pain? This line of thought is terribly natural, and I think it is what lies behind the inescapable conviction that the mind must be extra to the brain.’²⁵

Tye seems to agree with Papineau. Considering the specific physicalist claim ‘The visual experience of red = brain state B’ he says ‘Exercising the neurophysiological concept is not apt to trigger a visual image of red. It may then be tempting to infer that the right hand side has left out the phenomenology of the left, that there is a huge gap that the physicalist has failed to close.’²⁶

But are these suggestions convincing? Let us consider Loar’s claim first. To understand it we need to say a little about his terminology. By a ‘direct’ grasp on a property he means (roughly) one which is both accurate and not mediated by appreciating the relation of the property to something else. For example, if I identify squareness as ‘the geometrical property Plato discusses at Meno 82c-d’ or as ‘a property which if possessed by wheels will lead to bumpy progress in the vehicle’ then I think of it indirectly. But if I think of it as ‘squareness’ then I think of it directly. As we saw above, in discussing ‘perspectively subjective concepts’, defenders of the proposal allow that when we exercise our experiential concepts we do succeed in thinking about experiences directly. We do not grasp them merely via their capacity to cause something else in us, nor do we distort them or misrepresent them. It is important to defenders of the proposal to be able to maintain this. In part this is because the idea that our grasp is ‘direct’ has much intuitive plausibility. But it is also because the idea that in exercising experiential concepts we have an indirect grasp on specific physical properties, mediated by those properties causing sensations in us, will precipitate the specific physicalist into an infinite regress.

What evidence is there that we are inclined to the mistaken assumption that there cannot be two independent ‘direct grasps’ on a single property? Loar gives no general arguments of principle that the mind must work this way. Nor does he give any examples of other cases where this supposed natural expectation operates and leads us astray. Moreover there seem to be plenty of cases which provide counterexamples to his claim. For example, through trained perception I may come to an indexical grasp on some complex property, for example the property distinctive of the work of a particular artist. When I contemplate a picture I am able to judge ‘Here is an instance of that property {specimen of whatever property it is}’. The grasp I have is direct. It is the property itself which I am aware of. I am not dealing with some

²⁴ Loar (1997) p. 608.

²⁵ Papineau (2002) pp. 170- 71. Papineau’s ‘material’ is equivalent to ‘physical’, as used in this paper, and ‘phenomenal’ to ‘experiential’. He acknowledges inspiration from Nagel, (1974) fnnt 11, in developing his thoughts.

²⁶ Tye (1999), pp. 713, 723.

effect of it, or some intermediary between it and me. Yet my grasp on it may also be very inexplicit. Indeed it may be so inexplicit that I cannot say what I am responding to, cannot even indicate whether it is colour or line or texture or shape or some combination of them to which I am responding. But the inexplicitness of the grip need not tempt me to think that the property cannot be analysed and that I cannot be got to understand and accept some detailed account of it. Loar says that it is natural for us to suppose that a direct grasp of essence must be transparent. But our concept of an 'intuitive grasp' (at least in one understanding of that woolly notion) seems precisely adapted to enable us to express the idea that a direct grasp need not be transparent.

The remarks of the last paragraph are in no sense a complete discussion of the complex concepts ('direct grasp' etc.) used by Loar or of the claims he makes. Their role is only to suggest that what Loar says, insofar as we understand it, is far from obviously true. So he has not supplied us any good reason to accept the claim 'Even if specific physicalism were true, we would still be liable to find it perplexing and to be tempted to dualism.'

Papineau's general claim about how we are tempted into muddle is open to two readings, but is plausible on neither. On one interpretation the claim is that if exercising concept C involves some distinctive experience whereas exercising concept D does not, then we find it terribly natural to think that C and D cannot specify the same property. This looks to be plain false. If I exercise a perceptual indexical concept of a shape, for example 'has that shape {specimen of some complex shape}' then I will have an experience very unlike any which I have when I think of the shape as specified by an equation. But this does not prevent me thinking that the shape I see and the shape defined by the equation are the same.

Another way of reading his claim (possibly closer to what is intended) is this. If something is necessarily present (e.g. as an exemplar) when I exercise concept C but not when I exercise concept D, then we find it terribly natural to think that C and D cannot specify the same property. This is equally unconvincing. Compare thinking of some bodily posture as 'this position {my putting myself in the Lotus position}' and thinking of it as sitting with crossed legs and so forth, i.e. by using 'material' concepts. Adapting Papineau's claim, we may say '[T]here is an intuitive sense in which exercises of material concepts 'leave out' the [position] at issue. They 'leave out' the [sitting and having crossed legs], in the sense that they don't activate or involve those [positions]'. So far the adapted claim is entirely correct. But no one is tempted to add in this case 'Now, it is all too easy to slide from this to the conclusion that, in exercising material concepts, we are not thinking about the [positions] themselves.'

We may put the important points of this section thus. According to the specific physicalist, to have an experience just is to be in a certain complicated sort of brain position (so to speak). We are therefore owed an account of why our thinking about our brain positions is so strikingly contrasted with our thinking about other bodily positions, viz. in its capacity to generate illusions. The supporters of the proposal recognise this and try to supply such an account. But what they offer – the general principles which Loar, Papineau and Tye gesture at – are thin and unconvincing. They are unsupported by direct inductive evidence and counterexamples seem easy to find. There are no obviously plausible arguments from general psychological considerations, e.g. evolutionary epistemology, to suggest that we should expect to find ourselves liable to such errors. The weakness of the case for these supposed general illusion-generating principles suggests that it is a prior conviction of the truth of specific physicalism which makes the principles attractive, rather than the principles having independent force which would enable them to lend support to specific physicalism.

We find specific physicalist claims, for example a claim like (A), bewildering. Our initial difficulty with it is not of this form: we understand it perfectly well but it seems obviously false. The difficulty rather is that we just do not understand it. We do not see what it would be for the identity claim to be true, how the physical and the experiential could fit together as it lays out. If this is correct then there is a further problem with the strategy examined in this section. The specific physicalist tells us that if specific physicalism is true then we would, all the same be bewildered by it. To do justice to this proposal we have to take on board the hypothesis. But if we do not understand the hypothesis then we shall not be able to do this.

So what actually happens when we try? (It seems plausible that something, which might be interpreted as grappling with the hypothesis, does happen, since some philosophers proceed as if they had succeeded in grappling with it.) My guess is that the nearest we can get to hypothesising specific physicalism is entertaining a picture which amounts to the dual aspect theory. Given that picture, we can certainly agree that whenever I have a thought of the shape of (14) then I will also have a thought of the shape of (11). But clearly this is of no help to the specific physicalist, because it is a version of the dualism he rejects. My suspicion is that it is only the dual aspect picture, lurking unacknowledged in the background, which gives any plausibility to the whole line of argument we have been examining in this paper. If we try to think through how things would be if specific physicalism were true and experiential concepts indexical, while being thoroughly resolute in rejecting dual aspect theory, then we end up with the lines of thought pursued at the start of section 5. These lines of thought employ the only ideas – complex physical state, indexical representation of it – which the specific physicalist ought to think himself entitled to. And these lines do not work.

The upshot then is that reflection on the indexicality of experiential concepts has not helped specific physicalism. Yes, experiential concepts are indexical. But what has been stressed by all parties, when they agree to this, is that the exemplars involved in their application are themselves experiential. We are no nearer seeing how it could make sense to identify these experiential exemplars with something physical.

My own hunch is that our bewilderment at specific physicalism stems from a mismatch of logical form between remarks which report experiences of subjects and remarks which report physiological processes in bodies. If we want to see how we can reconcile general physicalism with the reality of consciousness we might do better to reflect on these matters, rather than trying to find defences for specific physicalism.

References

Bigelow, J. and Pargeter, R. (1990). 'Acquaintance with Qualia' Theoria, 56.

Block, N., Flanagan, O. and Guzeldere, G. (1997) The Nature of Consciousness. Cambridge Mass.: MIT Press.

Chalmers, D. (1996). The Conscious Mind (Oxford: Oxford University Press).

Davidson, D. (1968). 'On Saying That' Synthese 19, 130-146. Reprinted in his Inquiries into Truth and Interpretation, (1984) 93-108 (Oxford: Oxford University Press).

- Heal, J. (1997). 'Indexical Predicates and Their Uses' Mind 106, 619-640.
- Heal, J. (2001). 'On Speaking Thus: The Semantics of Indirect Discourse' Philosophical Quarterly 51, 433-454.
- Heal, J. (2003). 'Lagadonian Kinds and Psychological Concepts' in Heal, J. Mind Reason and Imagination Cambridge: Cambridge University Press. (Heal (1997) and Heal (2001) are also reprinted in this volume.)
- Heal, J. (unpublished). 'Reasoning about Thought'.
- Hill, C. (1997). 'Imaginability, Conceivability, Possibility and the Mind-Body Problem', Philosophical Studies, 87.
- Jackson, F. (1986). 'What Mary Didn't Know' Journal of Philosophy 83, 291-295.
- Kaplan, D. (1989). 'Demonstratives' in J.Almog, J.Perry and H.Wettstein eds. Themes from Kaplan (Oxford: Oxford University Press) 481- 563.
- Kripke, S. (1980) Naming and Necessity Oxford: Blackwell.
- Lewis D K 1990 'What Experience Teaches' in Mind and Cognition W. Lycan ed. Oxford: Blackwell, 499-519. (Reprinted in Block, N., Flanagan, O. and Guzeldere, G. (1997) 579-596.)
- Loar, B. (1997). 'Phenomenal States' in Block, N., Flanagan, O. and Guzeldere, G. (1997), 597-616. (Adapted from a version first published in Philosophical Perspectives ed J Tomberlin, Atascadero: Ridgeview Publishing 1990, 81-108.)
- Nagel, T. 1974. 'What is it Like to Be a Bat?' Philosophical Review, 83, 435-450.
- Papineau, D. 2002. Thinking about Consciousness. Oxford: Oxford University Press.
- Tye M 1999 'Phenomenal Consciousness: The Explanatory Gap as a Cognitive Illusion' Mind 108, 705-725
- White, S.L. (1986). 'The Curse of the Qualia' Synthese 68, 333-368. (Reprinted in Block, N., Flanagan, O. and Guzeldere, G. (1997), 695-718.)