

6.1 Introduction

So far I have relied on our ordinary understanding of the word 'mental'. I have talked of experiences, emotions, sensations, thoughts, beliefs, and desires, taking it that these things are paradigm examples of mental phenomena even if there are other, very different candidates for the title. On the whole, we use the term 'mental' very confidently. And yet there is considerable uncertainty surrounding the term.

'States', 'events', 'processes', 'occurrences', 'phenomena', 'abilities', 'properties'—these are some of the main general words with which 'mental' couples. I will also apply it to 'beings' and speak of mental beings. By this I will simply mean beings that have mental properties, and I will assume, in accordance with materialism, that all such beings are physical beings.

One example of the uncertainty surrounding the term 'mental' was given in 2.3: many philosophers think of publicly observable behavioral phenomena as entirely nonmental in character (as "mere" bodily movements), but some are inclined to count such behavioral phenomena as mental phenomena on account of the fact that they are standardly caused by, or constitutively "informed" by, things like beliefs, desires, hopes, fears, and so on. I will not discuss this (relatively unusual) sort of suggestion, however. Instead, I will take it that all the main candidates for the status of mental phenomenon are "in the head" (even those whose content cannot be specified without reference to things outside the head). Even if one restricts one's attention to what is in the head, there are plenty of problems.

It is sometimes said that *intentionality* is the fundamental mark of the mental, intentionality being the property that a thought, for example, has insofar as it is a thought about something, like justice or the city of Florence. I think this is a mistake, but I will leave intentionality until the next chapter.

6.2 Shared Abilities?

Machines that we take to be experienceless appear to share many abilities with us. They appear to be able to play chess, perform calculations, detect and distinguish the shapes and colors of things, sort circles from squares, estimate distances, judge size, and so on. When we consider ourselves, we think of these abilities as mental abilities or at least as abilities that involve mental abilities.¹ And obviously we take it that to possess a mental ability is to possess a mental property. But when we consider machines, most of us are very strongly disinclined to call the abilities they have ‘mental abilities’ or to think that they possess any mental properties at all. And the main reason why this is so is that we suppose that machines are experienceless.

I will assume that we are right about this. It would be foolish to claim that no artificial machine could ever have experience, and such a claim is no part of my present position. In what follows, however, I will consider only machines that are experienceless (no doubt these include all currently existing machines). And I will call the properties that we and experienceless machines appear to share the ‘X properties’.

Here are five possible responses to the problem the X properties appear to pose.

First response. [A] We are mental beings. [B] We and experienceless beings have the X properties in common. [C] We count the X properties as mental properties in our own case. Hence [D] we must count the X properties as mental properties in the case of experienceless beings. For

1. There are thousands of abilities, such as the ability to drive a car or walk a tightrope, that involve mental abilities although they are not just (or even primarily) mental abilities. One can group these abilities and any more “purely” mental abilities together under the single heading of ‘mental or mental-ability-involving abilities’, or ‘MOMAI abilities’ for short.

if [E] the *X* properties are correctly considered as mental properties in some cases, then [F] the *X* properties are correctly considered as mental properties in all cases. Hence [G] experienceless beings can have mental properties.²

Second response (extends the first). Given (A) through (F), it follows [G] that experienceless beings can have mental properties. Hence [H] we should count experienceless beings as mental beings. For [I] having a mental property is sufficient for being a mental being.

Third response (contraposes the argument in the second response). Since [not H] experienceless beings are obviously not mental beings, it follows that [not G] they cannot have mental properties, for [I] having a mental property is sufficient for being a mental being. So assuming that it is indeed true that [B] we and experienceless beings have the *X* properties in common, it follows that [not E] the *X* properties are not mental properties after all, properly speaking.

Fourth response (rejects the reasoning shared by the second and third responses, as well as part of the reasoning in the first). [A] We are mental beings. [not H] Experienceless beings are not mental beings. It is true that [C] we count the *X* properties as mental properties in our own case. But it does not follow that [D] we must count the *X* properties as mental properties in the case of experienceless beings. For (E) does not entail (F). It does not follow, from the fact that [E] the *X* properties are correctly considered as mental properties in some cases, that [F] the *X* properties are correctly considered as mental properties in all cases.

Rejection of the move from (C) to (D) (and hence of the move from (E) to (F)) need not sound completely counterintuitive, although it cheerfully violates Leibniz's Law. It may naturally be said that my ability to play chess is (obviously) a mental property that I possess, whereas the computer's ability to play chess is (obviously) not a mental property that it

2. This view is not without supporters, for the ability to think is presumably a mental ability if anything is, and Leiber (1991, 46) asserts that Turing was the first to emphasize "the most basic claim of cognitive science: that thinking is thinking whether realized in human neurology or microchips or whatever."

possesses. On this view, both the machine and I can play chess, but it only counts as a mental ability in my case.

Fifth response (arguably just a variant of the fourth). It is true that [F] the *X* properties are mental properties tout court. But it is false that [B] we and the experienceless beings have the *X* properties in common. That is, it is in fact wrong to suppose that the *X* properties are really properties of such a kind that the experienceless machine and I both possess them. The machine cannot really play chess at all, or tell the difference between circles and squares—not in the sense that I can. To play chess is necessarily to have (or to be disposed to have) certain experiences, in addition to making certain moves, following certain rules, and so on. Leibniz's Law is preserved.

6.3 The Sorting Ability

None of these positions looks fully satisfactory, but for the moment I will leave them without comment and consider some possible machines. Machine M_1 has no electronic circuitry. It has two holes: one circular, the other square. The diameter of the circle is slightly larger than the length of the side of the square. Suitably positioned circular shapes and square shapes pass over the holes, the former falling only through the circular hole, the latter only through the square hole. The machine sorts the shapes into two boxes.

In this case it may possibly be said that M_1 can “distinguish between circles and squares.” And the same may be said of other experienceless machines—like a clockwork machine, M_2 , that is active in a sense in which M_1 is not, because it is triggered (by placing the shapes in a certain receptacle) to manipulate the shapes into the positions in which they can be sorted, or a machine, M_3 , that tells the difference between circles and squares on the basis of information electronically transmitted from a prehensile sensor arm or from a light-array-sensing device.

There is a vast spectrum of possible experienceless beings. At the sophisticated end of the spectrum, the basis of the ability to tell the difference between circles and squares may be physically (or at least structurally) similar to the basis of our ability to do so, except for the fact that it does not involve or give rise to any sort of experience. Seeking

to move as close as possible to our own case, on the spectrum of experienceless beings, we can imagine a living, experienceless being with high-quality "blindsight": it has the ability to sort circles and squares presented at a distance on the basis of its sensitivity to their light-reflection properties, but it has no visual experience.³ We can imagine that the blindsighted being is naturally like this, and not because it has suffered some sort of damage, and that the physical basis of its ability to do what it does is similar to whatever continues to function well in the case of a damaged human being with high quality blindsight. (One can construct parallel cases for the other senses.)

We and all these other entities have what one might call 'the sorting ability' in common: the ability to sort out the circular shapes from the square ones. We are strongly inclined to say that the sorting ability is or involves a mental ability in our case, but not in their case. Why is this? Is it simply because we are experiencing beings? Very large numbers of our apparently mental abilities, such as our speech-interpretation abilities, seem to be grounded in entirely nonexperiential goings-on. Indeed, Lashley's famous remark that "no activity of mind is ever conscious" seems entirely accurate (1956, 4; see Jackendoff 1987, 45 f.). A question therefore arises as to whether our inclination is defensible. Here are a number of questions and responses.

Question 1. Would it be right to suppose that the sorting ability is always a MOMAI ability—a mental ability or a mental-ability-involving ability—when it is possessed by an experiencing being, say B_1 ?

Response. Surely not, for B_1 may be an experiencing being and have auditory experience, for example, while its possession of the sorting ability is grounded in a physical set-up just like that of machine M_1 ; so that its capacity for experience has absolutely nothing to do with its ability to sort circles and squares.

Question 2. If the sorting ability is to count as a mental ability in an experiencing being B_2 , is it sufficient that it be physically grounded in

3. Some might want to say that the being has no *conscious* visual experience, but I am using 'experience' in such a way that this is pleonastic (see section 1.2; contrast Rosenthal 1991). For a discussion of blindsight, see Weiskrantz 1986.

something that is part of B_2 's "central control system," something that involves processes that are physically or at least structurally similar to the electrochemical goings-on that occur in central control systems like ours?

Response. In this case, the sorting ability may conceivably be grounded in goings-on similar to those involved in the functioning of our autonomic nervous system, which we naturally think of as nonmental. More generally, it may be grounded in goings-on in B_2 's central control system that are in no way directly related either to any of the processes that are thought of as "subserving" B_2 's experiential states (in the way that the subexperiential computational processes postulated in the computational theory of vision are thought of as subserving our visual experience) or to any of the processes that are thought of as directly realizing any of B_2 's experiential states. And some will be inclined to say that in this case we do not have any very good reason to count the sorting ability as a specifically mental ability possessed by B_2 .

Question 3. Is the sorting ability correctly called a mental (or MOMAI) ability in the case of a naturally blindsighted being, B_3 , that possesses the ability to sort circles and squares on the basis of its blindsight and that is an experiencing being (it has auditory and olfactory experience) but that has, in fact, no *visual* experience, nor any other capacity for experience that is in any way connected to its possession of the sorting ability?

Response. Opinions may differ. We may insist that the sorting ability is not correctly counted as a mental ability in the case of experienceless machines like M_1 to M_3 , or indeed in the case of any entirely experienceless being, and we may be sure that it is correctly counted as a mental (or MOMAI) ability in our case. We may also, however, doubt whether it will be possible to find any clear principle that will sort out all possible intermediary cases, like that of the naturally blindsighted being B_3 , into those in which the sorting ability is correctly or appropriately called a mental ability and those in which it is not.⁴ More important, it doesn't seem to matter much—a point to which I will return.

4. Jackson (1993) suggests that one might be able to distinguish between experienceless machines that have a *prima facie* claim to *intelligence* and those that do not by reference to differences in their internal processing structures.

Question 4. If the sorting ability is to count as a mental ability, must possession of the sorting ability somehow directly depend on, or at least be somehow directly connected with, possession of the capacity to have certain sorts of experience?

Response. This is what the previous questions have been leading up to, but it is not clear that the word 'mental' allows us to return a definite 'Yes' to the question. One problem is this: Imagine a human being who loses normal vision while retaining high-quality blindsight. In this case some may want to say that the sorting ability no longer depends on an experiential capacity but is still a mental ability. Others may be inclined to say that it never really depended on an experiential capacity. They may say that such a case of blindsight suggests that an experiential capacity is never really essential (in any human being) to the apparently visual-experience-based possession of the sorting ability, although the sorting ability is still properly counted as a mental ability. Others again may say that the sorting ability started out as a MOMAI ability but ceased to be one when visual experience was lost.

The conclusion seems clear: we may not always be able to say whether or not it is best or appropriate (let alone correct) to call certain abilities, properties, states, or phenomena *mental*. This is not because of any failure of insight or lack of information on our part, but simply because there is no single right answer. Such is the nature of the term 'mental'.

Some theorists see mental phenomena as forming a great continuum. The continuum stretches from the most complex human experiential episodes down to the nervous-system activity that goes on in seaslugs, or enables *Cataglyphus*, a desert ant, to go straight back to its nest in the dark without any environmental cues after pursuing a zigzag outward path. (It is as if it has done some complicated trigonometry.) These theorists see no line to be drawn on this great natural continuum of *behavioral-control-system activity*. They see no interesting line that sharply divides truly and distinctively mental activity from nonmental activity on this continuum. And they add, forcefully, that we don't really need to use the word 'mental' at all, or to determine its extension precisely. We can say all we want to say without using it.

Others, at the other extreme, propose to restrict the domain of truly mental phenomena to experiential phenomena—to the surface phenomena of the mind, as it were. Those who take this second view hold that none of the extremely complex subexperiential brain processes that subserve the stream of experience are to be counted as mental phenomena, *sensu stricto*. Only experiential phenomena (including brain processes that can be literally identified with experiential phenomena) should be counted as mental phenomena. Everything else is mere mechanism, ultimately nonmental process. These theorists may offer an analogy: plays are not possible without a great deal of activity behind the scenes, but none of this activity is, strictly speaking, part of the play.

These two opposing sides will obviously differ on the question of whether there was mental life in the universe before there was experience. The first group will say that there was, the second will say that there was not. The first group may well grant that something very important happened when experience began, something quite new. But they will not agree that it was the beginning of mental life, the beginning of *mind*, a sudden switching on of the mental light. Mind, they will say, was already there.

They may add that the theory of evolution shows that the line between the mental and the nonmental cannot be sharp. For behavioral-control systems originally arise simply because certain randomly arising movement-tendencies turn out to have survival value, and hence tend to be preserved in succeeding generations. Thereafter, of course, things increase enormously in complexity, and at some point in this process of increasing complexity, some of the internal causes of the movement-tendencies come to be such that we find it natural to dignify them with the title of 'mental processes'. But it is indeed only a question of what we find natural, and our intuitions are not grounded on any precise criterion that makes a clear cut between the mental and the nonmental. The basic facts of natural history and evolution show that it is foolish to think that there could ever be a sharp answer to the question of when the title 'mental process' becomes appropriate.

A third group are happy to proceed with the philosophy of mind, and the science of psychology, without any attempt at a tight definition of the term 'mental', making do with our ordinary, more or less philosophically informed, more or less science-assisted, general consensus on the

question of the proper subject matter of psychology and the philosophy of mind. This third group may be right that it doesn't matter much how we put things, so long as there is some terminology or other in which we can agree on what we are talking about.

6.4 The Definition of 'Mental Being'

Now, however, I am going to define 'mental being' in such a way that it does draw a sharp line, by linking it with another term that draws a sharp line (it is sharp, although we cannot be sure where it runs).

The term in question is 'experiential' or 'experiencing': *B* is a mental being, according to the present definition, if and only if *B* is an experiencing being, that is, a being of such a kind that there is something it is like to be it, experientially speaking. Or rather—since experiencing beings may be unconscious or in dreamless sleep—a being whose current state or structure makes it now capable of experience, given appropriate stimulation, say. (This qualification raises problems of detail, since the question 'Capable given what?' arises. But the general idea is clear: an experiencing being is one that currently possesses all the equipment necessary for experiential states, whatever exactly that equipment is.)

'Mental being', then, is an all-or-nothing term. It draws a sharp line. It inherits this property directly from the term 'experiencing'. For it seems very plausible to say that any being either is or is not, at any given moment, in an experiential state (in a state given which there is something it is like to be it, experientially speaking), or in a state of such a kind that it is currently capable of being in an experiential state (given appropriate stimulation)—whatever we can or cannot know about the matter. Just as any number greater than zero is unequivocally a positive number, however small it is, just as any object that emits any photons is unequivocally a source of light, so any experience, however faint or rudimentary, is unequivocally an experience. Whatever the epistemological indeterminability of the question of whether there is experience going on in certain cases, it seems plausible that there can be no objective indeterminacy in the matter. We can't be sure where the line between experiencing beings and experienceless beings runs. We cannot be sure where experience begins on the evolutionary scale, as we consider progressively larger living organisms—viruses, bacteria,

paramecia, amoebas, grubs, insects, and so on. But there is, nevertheless, a fact of the matter.

It is true that the line between mental or experiencing beings and others may look unimportant from the point of view of animal ethology and general biology, which study the behavior of all living organisms without any regard to experience. The fact remains that it is a line of great importance. It is arguably the most important theoretical line to be drawn in the whole of reality. It is of great theoretical importance in the philosophy of mind (although some instrumentalists would deny this); the how and the why of its existence is one of the great unsolved problems of science; and it is of supreme moral importance.

I take it to be true by definition that only a mental being can have mental properties (be in mental states, etc.). It follows from the definition of 'mental being' just given, that only experiencing beings can have mental properties (be in mental states, etc.). Now it may well seem that any definition of 'mental being' ought to depend on a prior definition of 'mental' as applied to states, properties, and so on. On this view, a mental being is simply one that can have mental properties, etc., where the set of mental properties has already been determined. But I do not think we can do this, because of the particular way in which the word 'mental' is indeterminate. I do not think that we can fully determine the set of mental properties before settling the question of which beings are mental beings. Instead, it looks as if the best answer to the question of whether or not it is appropriate to count a certain property possessed by being *B* as a mental property may sometimes depend on whether or not one already has independent reason to think of *B* as a mental being, on the grounds that *B* has the key property of being an experiencing being.

The basic idea here is very simple: experience is crucial. (I am expounding an intuition, not offering an argument.) A being is a mental being just in case it is an experiencing being; only a mental being can have mental properties; so only an experiencing being can have mental properties. And when we ask which, if any, of the properties of a mental being, other than its experiential properties, are mental properties, the answer may be no more than a matter of convenient theoretical or terminological decision.

Equipped with this definition of 'mental being', one may attempt to choose between the five responses to the problem of the *X* properties raised in section 6.2. The first and second responses both claim that it is possible for experienceless beings to have mental properties, and are now ruled out. The third response is to be rejected because of its seemingly unacceptable conclusion that properties like the ability to perform calculations or play chess are not properly counted as mental abilities, or MOMAI abilities, in any case at all.

Nevertheless, the explicitly stated initial premises of the third response are plausible; the unacceptable conclusion is reached only by assuming the correctness of the move from (E) to (F)—the move from 'The properties in question are correctly considered as mental properties in some cases' to 'The properties are correctly considered as mental properties in all cases'. It is the validity of this move that is rejected in the fourth response, and I will now consider the fourth and fifth responses as offering two versions of the only tenable position left.

According to the fourth response, it is perfectly acceptable to say that we and the experienceless beings may add and multiply, play chess, differentiate circles from squares, and so on. The reason why this raises no problem is that it is also acceptable to say that in our case the abilities are correctly considered as mental (or mental-ability-involving) abilities, whereas in the case of experienceless beings, this is not so. This way of putting things may seem natural to some and hopelessly unsatisfactory to others, but it begs no substantive questions, for all parties to the dispute about the best use of the word 'mental' can fully agree about the facts of the case when they are stated, as they can be, without reference to the question of how best to use the word 'mental'. So everything is above board. On the present view, the primary anchor of all decisions about what should or should not be called 'mental' is the ruling that only experiencing beings are mental beings and that only mental beings can have mental properties. But this ruling is only a first step. It leaves plenty of room for dispute about exactly which of the properties of mental beings should be counted as mental properties.⁵

5. If the property of being thought about is a mental property, then experienceless beings can certainly have mental properties, but I will ignore this suggestion.

One can also express this general position (and respect Leibniz's Law) by endorsing a version of the fifth response according to which there is a crucial sense in which we can play chess, etc., but in which experienceless machines cannot really do so at all. One kind of case in which this sort of proposal seems very natural is this: Suppose there are two experienceless machines that ask and respond to personal questions, one of which is "kind" and the other of which is "heartless." (Such machines are not hard to construct.) We are strongly inclined to say that the "kind" machine is not *really* kind at all and that the "heartless" machine is not *really* heartless at all. The "kind" machine's verbal output may be like that of a kind human being, but the machine is not really kind, simply because its behavior lacks the necessary backing of genuine mental attitudes or experiential episodes. The problem is simply that there is no one there, no subject of experience, and what the fifth response does, plausibly or not, is to suggest that our natural response to the case of the "kind" and "heartless" machines is much more generally appropriate: it is appropriate not only in the case of kindness and heartlessness, but also, if less obviously, in the case of playing chess.

Let me ward off two objections. First, I have claimed that only experiencing beings can have mental properties. It needs to be stressed that this is not to claim that all mental properties are experiential properties. It is not even the weaker claim that the instantiation of any mental property somehow necessarily involves experiential occurrences. It is no objection to the present view to say that some of the properties that we normally think of as mental—e.g., the property of believing that wine is wet or the property of liking olives—are nonexperiential in character, insofar as their possession at a given time usually has nothing to do with any experiential goings-on. On the present view, properties like these can count as fully mental properties even if they are nonexperiential properties, so long as they are possessed by experiencing beings. (We have, of course, a powerful intuition that they can only be possessed by an experiencing being, that only an experiencing being can correctly be said to believe anything, or like anything, or fear or hope or understand anything.)

Second, the present view does not prevent one from saying

[A] that the subexperiential processes that directly subserve our experiences are themselves mental processes, given that they go on in mental beings and have the function they do.⁶

It does, however, require one to grant

[B] that none of the processes that subserve the ability of an experienceless being to detect, e.g., the color and shape of objects are mental processes,

even if these processes are *very strikingly similar* to subexperiential processes that go on in us, and, e.g., involve sensitivity to objects' light reflection, absorption, and emission. The present view requires one to maintain (B) even when the experienceless being in question is a naturally blindsighted, organic experienceless being and the processes that subserve its blindsight capacity are physically very similar to some of the vision-subserving processes that go on in us. It requires one to maintain (B) even when one supposes that these two sets of processes are as similar as they can possibly be, given that the experienceless being is indeed entirely experienceless.

This may not seem satisfactory, but one has to choose between options already described. There are three: [1] One may insist on (A) and also accept (B), although this position feels rather unstable. [2] One may accept (A) and then feel that considerations of theoretical smoothness force one to reject (B), on account of the functional, structural, and/or physical similarity of the physical processes in the experiencing being and the experienceless being—so that one ends up granting that experienceless beings can host mental processes and hence have mental properties. [3] One may acknowledge the force of the considerations of theoretical smoothness that seem to lead straight from (A) to the denial of (B), and so deny (A) in order to accept the undeniable (B). In the

6. 'Directly subserves' is vague, but in trying to say which nonexperiential processes are mental processes, one has to distinguish between the (arguably mental) processes studied by the computational theory of vision and the processes involved in the maintenance of the brain's blood-sugar supply. (Nonmental processes outside the brain, e.g., all the processes essentially involved in the maintenance of life, are also necessary for visual experience, and hence subserve it indirectly.)

present context, (3) may look preferable to (1), and both are preferable to (2). But I think that in other contexts, (1) can look preferable to (3).

It may be that a balanced position will seesaw. It will oscillate between accepting that there are reasons for saying that no nonexperiential processes are truly mental states or processes, in accordance with (3), and accepting that there are reasons for saying that there are certain nonexperiential processes that should themselves be counted as genuinely mental processes, in accordance with (1).⁷

6.5 Mental Phenomena

Suppose it is now assumed, contrary to (3) above, that at least some nonexperiential states and processes are correctly counted as mental states and processes. Is it possible to say exactly which ones? Is it possible to specify which (if any) of the properties of mental beings, other than their experiential properties, should be counted as mental properties?

An attempt to answer this question amounts to another shot at the general question of what the word ‘mental’ means. I’m not sure how important the general question is, for it seems that we can say everything we want to say without using the word ‘mental’ at all. And yet the frequency with which the word is used in books and articles about philosophy of mind makes the question seem worth considering. As in previous chapters, I will speak of Louis, and of the Louis-reality or L-reality.

So we are now concerned only with experiencing or mental beings like Louis. The question is, Which of their properties, other than their experiential properties, are mental properties? If we shift (I think usefully) from talk of properties to talk of phenomena, the question be-

7. Objection: If there are true identity statements asserting identity between nonexperiential brain processes and experiential processes, then it follows immediately that some nonexperiential processes are correctly said to be mental processes. Reply: There can be no such true identity statements. If a process is indeed an experiential process, then that is what it is, and it is not identical with any nonexperiential process. Rather there is a single process that has both experiential and nonexperiential features; and it is still open to someone who thinks that only experiential phenomena are mental phenomena to deny that the nonexperiential features are properly called mental features.

comes, Which of the phenomena in the L-reality, other than the experiential phenomena, are mental phenomena?

One answer to the question is, 'None. Experiential phenomena are the only true mental phenomena there are. *Mental reality* is just experience, everything that features as part of the conscious stream of experience of a mental being like yourself: sensations, perceptions, consciously entertained thoughts, felt moods, and so on. Mental reality is the surface. None of the subexperiential processes that make it possible are part of mental reality, insofar as they could conceivably go on without there being any experience. Even if there were nonexperiential processes that were causally sufficient for the existence of experience, so that they could not possibly occur without there being experience, they would not be part of mental reality. Not even the phenomena of subliminal perception and peripheral vision are part of mental reality, if they involve no experience.'

On this view, mental reality is like the play mentioned earlier: none of the backstage activity that makes the play possible is actually part of the play. This view has the attraction of simplicity and corresponds to at least some of our intuitions. Ordinarily, however, we allow that there are also nonexperiential mental phenomena. Many agree with the following. [1] It can be true at time t , simply true, true *sans phrase*, that Louis believes that water is wet and likes raspberries. [2] Truths like those mentioned in (1) are truths that record, and are made true by, the existence of real mental phenomena at t . [3] This is so even though Louis's believing that water is wet and his liking raspberries are not experiential phenomena (he may be in a dreamless sleep at t).

To accept (1) through (3) is to accept that there are nonexperiential mental phenomena as well as experiential mental phenomena. The next taxonomic step is to ask whether members of these two classes of phenomena either can be, or must be, *occurrent* or *dispositional*, considered specifically as mental (and mentally contentful) phenomena.⁸

The first part of the answer is easy. *Experiential* mental phenomena are necessarily *occurrent*. There are no *dispositional experiential* phenomena.

8. Every *occurrent* phenomenon may be said to have *dispositional* features, but the distinction will do for present purposes.

That leaves *nonexperiential* mental phenomena. These need a more extended discussion. It is widely held that there are *dispositional* nonexperiential mental phenomena, like beliefs and pro-attitudes, and that these have exactly as much claim to be counted as mental phenomena as experiential phenomena do. And if this is right—it will be questioned below—the only remaining question is whether there can really be said to be *occurrent* nonexperiential mental phenomena. Should we count as mental phenomena at least some of the many nonexperiential processes currently occurring in Louis's brain as he has a visual experience, or tries to work out whether $17 \times 19 = 323$, or whether q follows from p , given that $[p \rightarrow r]$ and $[\neg q \rightarrow \neg r]$? I will begin with this question, although I will shortly raise a doubt about its formulation.

No one wants to count all the occurrent nonexperiential processes that occur in the brain as mental processes—including all the processes involved in the maintenance of sufficient blood supply, the upkeep of axon myelination, and the manufacture of neurotransmitters. In fact, it seems plausible to suppose that few or none of the continuously occurring nonexperiential processes in the brain on which the persistence of the belief that p depends should be counted as mental phenomena. These processes are best seen as processes that have no distinctively mental description, over and above their physics (or neurophysiology) description. They include intraprotonic and other nuclear processes, other subatomic processes, molecular-bonding processes, and so on, up to processes for maintaining the blood-sugar level and processes for the physical upkeep of the neuronal network.⁹

So the question is this: where exactly do the nonexperiential processes that count as mental processes begin? The problem may be difficult, but it seems clear. We want to hold that some of the nonexperiential processes in the brain are mental processes, and we cannot plausibly hold that all of them are. So we have to draw a theoretically well motivated line between those that are and those that are not.

But now it looks as if this isn't the right way to put the question. For many of the nonmental, nonexperiential processes just mentioned (e.g., the nuclear and interatomic processes) are in fact integrally involved in

9. It is arguable that all states are processes on the materialist view, since everything is in time and the constituent parts of matter are constantly in motion.

everything or almost everything that goes on in the brain. So in supposing that there may be occurrent, nonexperiential processes going on in the brain that do deserve to be thought of as mental processes, one obviously cannot be supposing that one is dealing with a set of processes that are entirely ontically distinct from all the nonexperiential processes that do not deserve to be called mental processes. Rather the situation is this: One is confronted with the total reality of a living brain persisting through time, and there are a great many different ways of picking out and describing processes going on in this brain. That is, there are ways of describing what is going on that deliver process descriptions, and these, by a reificatory turn of phrase that is harmless so long as one recognizes it for what it is, may be called descriptions *of* processes. The mistake to avoid, with this count-noun talk of processes, is the mistake of supposing that all these processes are entirely ontically distinct from each other. The truth is that many different process-identifying descriptions are being used to talk about the same portion of reality in different ways: in computational terms, electrochemical terms, experiential terms, subatomic terms, and so on.

Once we are clear on this, we can continue to talk in terms of processes. We can say that process-identifying descriptions couched in computational terms pick out computational processes, process-identifying descriptions couched in electrochemical terms pick out electrochemical processes, and so on. In the same way, we can say that process-identifying descriptions couched in nonexperiential terms pick out nonexperiential processes, and restate the present suggestion: some nonexperiential processes deserve to be called mental processes, given the nature of the description that identifies them, whereas others do not. They deserve to be called mental processes although it is also correct to call them nonexperiential processes, given the description that identifies them. More particularly, many of the subexperiential processes that subserves vision, calculation, and so on, deserve to be called mental processes. They deserve to be called mental processes even if we assume that they are distinct from the brain processes that realize the experiential processes of visual experience, conscious calculation, and so on. These subexperiential processes are of course physical processes, on the materialist view, and have a physics description. But they are also held to have a description given which they have a claim to be called mental

processes, in spite of the fact that they are nonexperiential processes. This description may be some sort of computational or “program” description. It may even be some description that naturally employs the same sorts of term as those we use to describe or refer to the content of indubitably mental processes, like sensations or conscious entertainings of thoughts.

We now have three possible positions before us:

- [1] Only experiential phenomena (E phenomena) are truly mental phenomena.
- [2] The class of mental phenomena also includes dispositional, nonexperiential phenomena (DN phenomena), such as beliefs, pro-attitudes, and memories, in addition to E phenomena.
- [3] In addition to E phenomena and DN phenomena, the class of mental phenomena also includes certain occurrent nonexperiential phenomena (ON phenomena), such as the subexperiential processes that subserve vision, mental calculation, and so on.

There is, however, a fourth possible position:

- [4] The class of mental phenomena includes E phenomena and ON phenomena but not DN phenomena.

Position (4) might appeal to someone who is inclined to take an eliminativist attitude to propositional attitudes, and indeed to mental dispositions in general, but who wishes to take a fully realist attitude to the existence of both experiential phenomena and subexperiential mental goings-on.

6.6 The View That All Mental Phenomena Are Experiential Phenomena

Need we choose between these positions? I don’t think so. It’s enough to get the options reasonably clear and to have some sense of the considerations that count for and against each of them. I will try to take things a little further by considering some of the arguments in favor of position (1). Ordinary talk appears to favor (2) and, I think, (3) over (1) and (4), but the attempt to defend (1) may help to clarify some important parts of our thought about the mental.

Here, then, is an enriched statement of position (1). It begins with the following assumption:

[a] All truly *mental* phenomena are intrinsically mentally *contentful* phenomena; such mental contentfulness is necessary and sufficient for being a mental phenomenon.

I will take this assumption for granted in expounding position (1), and consider a doubt about it at the end of the chapter. It raises the long question of what kinds of mental content there are, but I will say as little about this as possible. There is undoubtedly sensory content, and there is undoubtedly conceptual or cognitive content, and for the purposes of argument I will inquire no further. It may be doubted whether emotional-feeling content can plausibly be supposed to reduce to sensory and conceptual content, and there are reasons to doubt whether the distinction between sensory and conceptual content is exhaustive as well as exclusive (i.e., there are reasons for thinking that there is such a thing as nonsensory, nonconceptual content; see Peacocke 1992, 76–90). There are also questions to be asked about the distinction between “broad” and “narrow” content, and so on. But I will not address such questions. Instead, I will start from the simple fact that we know a great deal about the nature and varieties of mental content simply by having experience in the way we do, and I will take it that this knowledge sufficiently grounds our understanding of the notion of mental content, so far as the purposes of the present discussion are concerned. It gives us a strong fix on what mental content is. This is so even if we are ordinarily unable to put much of this knowledge into words; even if we vary among ourselves more than we realize; even if there are also many things we do not know about the nature of mental content; and even if there may be ways in which mental content can exist in reality that are unlike the ways in which it exists when experiential phenomena occur.

Some may claim that appeal to the acquaintance with mental content delivered by ordinary experience is unhelpful in a discussion that aims to address the real issues and difficulties in the theory of content. I think that any such claim would indicate serious confusion, but there are many sorts of problem in the theory of mental content, and it is sufficient for present purposes that it be granted that there is some solid sense in

which we know a lot about what mental content is simply in having experience in the way we do.

Position (1) may now be articulated as follows.

[a] All *mental* phenomena are intrinsically *mentally contentful* phenomena.

[b] All *experiential* phenomena are intrinsically mentally contentful phenomena.

[c] No nonexperiential phenomena are intrinsically mentally contentful phenomena.

Hence,

[d] no nonexperiential phenomena are mental phenomena.

That is,

[e] all mental phenomena are experiential phenomena.

I take (b) to be self-evident. The crucial claim is obviously (c), and the intuitive idea behind it may be expressed as follows: Consider Louis in a dreamless sleep at time *t*. He is in a completely experienceless state. Ex hypothesi, there are no experiential phenomena in the L-reality.¹⁰ The question is then this: are there really any intrinsically mentally contentful mental phenomena in the L-reality at *t*? According to position (1)—the view that all truly mental phenomena are experiential phenomena—there are not.

The principal objection to this has already been mentioned, and goes as follows: Louis is a normal human being, and the following things are true of him at *t*: he believes that water is wet, he likes sunshine, he intends to go to Paris next week, he prefers black to green olives, he possesses the concepts of addition and adultery, he is witty, modest, and melancholic. According to the objection, the statements attributing these properties to him are not just part of our “best current theory” for explaining and predicting Louis’s behavior, if this is supposed to amount to something less than truth. They are, quite simply, true.¹¹ It would

10. On the assumptions, which I am happy to make (see p. 138), that Louis is the only experiencer in the L-reality, and that there are no subsystems within Louis or the L-reality that are also subjects of experience.

11. This strong realist claim can only strengthen position 2, which I am currently arguing against on behalf of position 1.

seem to follow immediately that these statements *truly describe part of mental reality, at t*. After all, they state part of the simple truth about how things are in the world at *t*, and they employ indubitably mental terms to do so.

This sounds plausible. And yet there seems to be a deep difference between the truth conditions or “reality grounds” of the truth of statements attributing experiential mental phenomena to the L-reality (call these E statements) and the truth conditions or reality grounds of statements attributing nonexperiential but allegedly genuinely mental dispositional phenomena (beliefs, preferences, knowledge of French) to the L-reality (call these DN statements). In the case of each type of statement, the question is, What is there, existing now in the world, that makes the statement true now? On the standard materialist view, nonexperiential neural arrangements and goings-on are among the reality grounds of the truth of both sorts of statement. But in the case of E statements, intrinsically mentally contentful goings-on, i.e., the experiential phenomena themselves, are also among the reality grounds of their truth, whereas in the case of DN statements, only nonexperiential neural arrangements and goings-on feature among the reality grounds of their truth—physical arrangements and goings-on that can be described by physics and have no intrinsic mental contentfulness. This is shown by the fact that DN statements can be true of Louis at *t* when there are no experiential phenomena in the L-reality. On this view, although it is true that Louis in his dreamless sleep believes that water is wet and likes black olives, this is not because of the existence of any intrinsically mentally contentful mental phenomena in the L-reality at *t*.

It will be objected that this just begs the question about what intrinsic mental contentfulness is, but my present aim is to articulate an intuition, not to argue for it. The analogy is perhaps imperfect, but the sense in which there is a certain mental reality at *t*, with certain specific characteristics, as Louis sleeps dreamlessly on with all his beliefs, preferences, and so on, is a bit like the sense in which there is music in the world, and specifically Beethoven’s quartets, even if no one is playing any music, but there is a set of compact discs of Beethoven’s quartets loaded in a CD player. In this case there is complete silence. No music is to be heard. But there is a sense in which music, specific music, can be said to be part of reality now—a sense that one has fully understood when one

knows about CDs and CD players. The sense in which music is part of reality in this case arguably closely resembles the sense in which something mental is part of the L-reality as Louis lies in his dreamless sleep, utterly experienceless but with all his beliefs, preferences, and so on.

To change the analogy, suppose that we have a computer program that is used to model the Panamanian economy with histograms and pie charts. We may come to think that it is intrinsically about the Panamanian economy. But—a familiar point—it may work equally well when the shapes that appear on the computer screen are given a different interpretation, and it is employed to model wind flow round the Outer Hebrides. The program, as it runs, is no more intrinsically about the one thing than the other. Considered merely as a computational structure or process, it has no intrinsic (mental) content at all. I suggest that exactly the same may be said of the nonexperiential processes going on in Louis's brain—all those in virtue of which it continues to be true to say of him that he believes that *p*, likes *c*, and so on.

One can carry the analogy back into Louis. Suppose that we can maintain him indefinitely in a state of dreamless sleep—a completely nonexperiential state—while leaving everything else about him completely normal. In this state he has thousands of beliefs, preferences, and so on, just as he does when he is in natural dreamless sleep. His brain processes continue just as they ordinarily do when he is in natural dreamless sleep. But now we detach his brain from his body and install it in a machine that drives a light show device on the basis of the neural structure and neural activity it detects. In the same way, we could put a CD of Beethoven's fifteenth string quartet in a CD player adapted to drive a light-show device on the basis of the patterns cut in the surface of the CD. As it sits there, a physical object with a complex structure, the CD is not *intrinsically* musically contentful. It is no more intrinsically musically contentful than it is intrinsically light-pattern contentful. Nor are our brains intrinsically mentally contentful, on the present view, when considered as physical systems in which no experiential processes are going on. They can no more be said to be intrinsically mentally contentful, on the basis of the typical behavior and experience they produce when normally sited and connected in a human body, than they can be said to be intrinsically light-pattern contentful on the basis of the typical light-show effects that they produce when installed in the light-

show device. Nor can their individual causal history (or long-term evolutionary history) be appealed to in arguing that they are intrinsically mentally contentful, on this view.

Certainly, so far as facts in the L-reality are concerned, we suppose that it is something about the physics-describable physical arrangement of the brain that makes it true to say that Louis believes that water is wet (the point of the clause 'so far as facts in the L-reality are concerned' is that this truth also depends on causal facts about Louis's past acquaintance with water). Nevertheless, belief states (i.e., states of a being in virtue of which it is true to say that it believes that *p* or that *q*) are not states of the brain, or of Louis, with intrinsic mental content. They are not states or structures that have intrinsic mental content, although they standardly sit in the dark of nonconsciousness. On the present view, it is no more true to say that there are states of the brain, or of Louis, that have intrinsic mental content, when Louis is in a dreamless and experienceless sleep, than it is true to say that there are states of a CD that have intrinsic musical content as it sits in its box.¹²

It follows that there are no truly mental phenomena in the L-reality as Louis sleeps dreamlessly on. It is true of Louis that he believes that water is wet and likes black olives, just as it is true of this CD that it is a CD of Beethoven's fifteenth string quartet. But there are no mental phenomena in the dreamless L-reality, just as there is no music in the room as the CD sits on the shelf. For there are no intrinsically mentally contentful phenomena in the L-reality, and mental phenomena are intrinsically mentally contentful, on this view. Everything else is nonmental. It is experienceless structure, mechanism, or process. It is something that can exist in experienceless beings that are not mental beings at all and have no mental properties. That is the intuition. It is only an intuition, but it has a natural place in a discussion of the word 'mental'. The conclusion it leads to is that there are, strictly speaking, no dispositional nonexperiential mental phenomena.

12. Here the present position coincides with certain aspects of tough functionalist and instrumentalist views, and even limited eliminativist views. Differences remain in that the present position involves a commitment to two things in particular: outright realism about the experiential and the idea that ascriptions of propositional attitudes can be simply true. Searle (1992, chap. 7) argues differently for a related position.

It may be objected that I am making two incompatible claims: [1] Louis is in a state of such a kind that it is true to say of him that he has a contentful belief, a belief *about water*. [2] There is no state of sleeping Louis that is contentful, or about anything. In reply I can only repeat the CD analogy. Consider a CD of Beethoven's Opus 132. It is a physical object, and nothing about it is intrinsically musically contentful. So too nothing about Louis's brain at *t*—about the L-reality at *t*—is intrinsically mentally contentful. When certain things happen to the CD, there is music of a certain kind. When certain things happen to Louis's brain, there is mentally contentful experience of a certain kind. This is why we say that this is a CD of Beethoven's Op. 132, and this is why we say that Louis believes that water is wet. I take this to be in accord with Searle's claim that what are going on in the brain are neurophysiological processes and consciousness and nothing more (1992, back cover).

Having said this, Searle holds out (p. 158) for the view that beliefs are unconscious, intrinsically mental, intentional states, whereas I deny this. It is arguable, however, that this is just a (nonnegligible) difference of emphasis. Searle later stresses that "the ontology of mental states, at the time they are unconscious, consists entirely in the existence of purely neurophysiological phenomena" (p. 159), and it may be that when he talks of "purely neurophysiological phenomena," he means phenomena that cannot really be said to be intrinsically mentally contentful, considered in themselves, any more than a CD can be said to be intrinsically musically contentful, considered in itself. If this is right, then we are in agreement.

So far I have defended the view that there are no dispositional, nonexperiential mental phenomena, strictly speaking. A question remains as to whether there are *occurrent* nonexperiential mental phenomena. That is, are there any occurrent, nonexperiential phenomena that can be thought of as intrinsically mentally contentful? Here are two suggestions that support the view that there are.

First, it is Tuesday, and one has been given a posthypnotic command to leaf through every book in the room the following Sunday. On Sunday one has a strong desire to do so, and one does. In this case one is very likely to have acquired the conviction that one has left something

important inside one of the books. For one will be under heavy pressure to be able to cite a belief that will permit one to make sense of one's action both to oneself and to others. Where does the belief come from? Presumably some nonexperiential process has gone on in one and has generated a belief that allows one to make sense of one's urgent desire and consequent behavior. The question is, How has the nonexperiential process managed to produce such a perfectly appropriate belief? It is natural to suppose that such a perfectly appropriate belief can be produced only by a process that, although nonexperiential, somehow involves the entertaining of the content that one wants to leaf through every book in the room. That is, it seems natural to think of the belief-forming process as involving occurrent and nonexperiential, but essentially mentally contentful, goings-on.

Here is the other case. One is stuck on some problem. One thinks that p is surely the case, but one does not see how, for q is certain, and $[q \rightarrow \neg r]$ and $[p \rightarrow r]$. One puts the problem aside for a few days and goes on holiday. Returning to the problem with a sinking feeling, one finds that something has shifted. One is no longer stuck, one can see how to go on. As before, p and q are indeed the case, and $[q \rightarrow \neg r]$. But it is not true after all that $[p \rightarrow r]$. Rather, $[p \rightarrow r]$ is true only if s is (i.e., $[[p \rightarrow r] \rightarrow s]$), and s may not be true. This is what one has come to see. Here it seems natural to suppose that the reason why one is no longer stuck is that one has worked something out entirely nonexperientially (it was no part of the course of one's experience while on holiday, for one was swimming and walking from dawn to dusk, and gave the problem no thought at all). And if one supposes that this is so, then it also seems natural to suppose that what must have occurred was a mental process with a certain specific conceptual content, a process that, at the very least, involved some sort of entertaining of the originally problematic propositions. And this seems, at least *prima facie*, to suggest that there are occurrent, nonexperiential processes that can naturally be thought of as intrinsically mentally contentful.¹³

Another familiar experience is this: a useful new thought, perhaps about a philosophical problem, flashes up out of nowhere when one is

13. Nelkin (1993) uses a similar example for essentially the same purpose. He suggests that blindsight and hemineglect also provide cases in which occurrent nonexperiential processes have intentionality, and hence mental content.

engaged with something else. This again suggests that one has been thinking about the problem in some sense, but nonconsciously or non-experientially, or at least that thought processes have been occurring that concern it, and that therefore have specific mental content.

In fact, there is nothing special about these cases. The same sorts of nonexperiential process go on every time we have a conversation and speak cogently in reply without any conscious process of formulating a reply. Writing this sentence, I do it simply by waiting for the appropriate words to come up into consciousness as a result of some process of which I know nothing except its results (it is this sort of thing that motivates Lashley's remark that "no activity of mind is ever conscious"). So if there is a good case for supposing that intrinsically mentally contentful, nonexperiential processes are possible at all, there is probably a good case for supposing that there are a huge number of them. The well-known phenomenon of driving while absorbed in conversation is also worth considering in this connection.¹⁴

Others who think that there are occurrent nonexperiential mental phenomena may do so because they take a realist attitude to the Freudian unconscious and its operation. But this idea adds nothing essential to the cases I have already considered.

All these suggestions have a common purpose. They seek to show that even if one holds that a truly mental phenomenon must be an *intrinsically mentally contentful* phenomenon, one is not obliged to conclude that it must be an *experiential* phenomenon. But they do not amount to anything as strong as an argument against (e) on p. 164, the view that only experiential phenomena are genuinely mental phenomena, and those who hold (e) will be unmoved. They will insist with Searle (1992, 187) that "the only occurrent reality of the mental as mental is consciousness" or experience. They may say that the nonexperiential processes that underlie the phenomena described in the last five paragraphs

14. See Jackendoff 1987, 280. Consider also the phenomenon of one's mind wandering radically while one continues to look at a scene. In this case it might be argued that the mentally contentful, mental visual field persists as a nonexperiential content. It persists even though there is no visual experience being had by anyone—no visual experience of the sort that there would be if conscious attention were to be paid to the contents of the mental visual field. See Lockwood 1989, 162–168; Dennett's discussion of the game of Hunt the Thimble (1991b, 334–335); and Rosenthal 1991.

are no more intrinsically mentally contentful than the processes that go on in a pocket calculator. They will take the same attitude to occurrent nonexperiential phenomena as was taken above to dispositional nonexperiential phenomena. They will hold to (c) on p. 164 above, the view that *mentally contentful* implies *experiential*, and it is hard to see how they can be argued out of this position.

Clearly there is nonexperiential processing of information in some sense. But this is not *mental* content, according to the present view. It is no more mental content in the case of processes in your brain than in the case of processes in a pocket calculator. The two cases are fundamentally identical. Suppose that the capacity for experience were permanently and cleanly subtracted from your brain (perhaps by interfering with the reticular activating system) so as to leave almost everything else untouched. In this case complicated nonexperiential processes might continue. The nonexperiential process that would have resulted in your having the experience of suddenly seeing how to solve a philosophical difficulty might continue without ever giving rise to that experience. But it would not be correct to say that the process had intrinsic mental content. Linked to a light-show device, it would do one thing. In your untampered-with brain, it would have done another thing. In a music-generating device, it would do a third thing. Considered in itself, it cannot be said to have intrinsic mental content. That is the intuition.

One may go further. There is an important sense in which Lashley's remark that "no activity of mind is ever conscious" appears to be true (1956, 4). Jackendoff gives good reasons for supposing that the best way to think of those linguistic-image-involving processes that we naturally call processes of conscious thought is just as "experiential evidence" that operations of thought (in themselves nonexperiential) are or have been going on (1987, p. 288). On the present view, none of these occurrent nonexperiential processes or activities of mind are themselves intrinsically mentally contentful. They could conceivably go on in an experienceless light-show device. Yet the present view does not threaten us with [1] the conclusion that we are somehow helpless passengers of our machinery, or [2] any puzzle about how mental content can appear to be causally efficacious.

As for (2), it is true that I have presented reasons for saying that there is no "true" mental content outside consciousness or experience. But

(roughly and rapidly) there are also clear and conclusive reasons for saying that everything that matters about content, causally speaking, can be present without consciousness. There really is no “problem of mental causation,” given materialism. This is the (by now extremely familiar) lesson of universal Turing machines and, more concretely, of pocket calculators, computers, and other artificial intelligence devices—things that show how rational and practical-rational procedures, for example, can be embodied or realized by physical structures and processes that know nothing of rationality (see Fodor 1992). Nature in her wisdom (natural selection) has ensured that we and other animals contain and host such structures and processes (see Hume 1975, 55).

As for (1), the claim that we risk turning out to be helpless passengers of our machinery: it is false, because we are our machinery. There is *no* threat to our autonomy in, e.g., Libet’s claim to have shown that conscious decisions to perform actions may occur after the processes that lead to the execution of those actions have been initiated in our brains (Libet 1985, 1987, 1989). For even if this claim is true, it doesn’t threaten anything that matters to us. My decisions are not less my own because the processes that lead to them are nonexperiential. They are not, for this reason, less rational or less mine; they are not less expressive of my wishes or personality. If my conscious thoughts are best thought of as “experiential evidence” that (nonexperiential) operations of thought are or have been going on in me, it does not follow, and is not in any sense true, that the thought that goes on in me is for that reason not really my own thought.

I will end this section by raising a doubt about the so far unquestioned condition of intrinsic mental contentfulness (condition (a) on p. 164).

It may be objected that we have to recognize, as truly mental, certain brain operations—call them B operations—that are not themselves intrinsically mentally contentful, although they involve the manipulation of items that we do think of as intrinsically mentally contentful. An example might be the operation of moving from $\neg q$ and $[p \rightarrow q]$ to $\neg p$. Searle gives a general argument that we have to recognize such B operations (Searle 1992, chap. 8; see also the exchange in Stroud 1991 and Searle 1991).

Once this objection is raised, it may look as if a whole new area of debate and uncertainty is about to open up. In fact, however, the objection leads back to issues already discussed. For various descriptions of these operations will be available, and one can say the following. If [1] the B operations are described in such a way that they could conceivably go on in experienceless beings, then it is open to those who hold that all truly mental phenomena are intrinsically mentally contentful, and that intrinsically mentally contentful phenomena can never occur in experienceless beings, to insist that the B operations are not rightly thought of as essentially mental in character. A computer “programmed” by a burst of radiation from outer space can seem to be as keen on *modus ponens* and *modus tollens* as the best of us. There is a natural way of describing the capacity to engage in *modus ponens* that does not require one to attribute intrinsically mentally contentful states to the entity that one ascribes this capacity to.

If, alternatively, [2] the B operations are described in such a way that they cannot possibly be supposed to go on in experienceless beings, then presumably this can only be because their full description involves ineliminable reference to intrinsically mentally contentful happenings after all; in which case they do not constitute a potential counterexample to the view that intrinsic mental contentfulness is a necessary condition of mental phenomenonhood.

Objection: The ‘presumably’ in the last paragraph is unwarranted. Perhaps [3] the B operations are not intrinsically mentally contentful in themselves but are nevertheless causally sufficient for the occurrence of intrinsically mentally contentful experiential phenomena, so that they cannot be supposed to go on in experienceless beings. Reply: The case may be granted, but it changes nothing essential. Some may think that it provides further reason to say that some occurrent, nonexperiential, and indeed noncontentful phenomena may themselves be counted as mental phenomena, but others will disagree.

A better case, for those who wish to say that there are some operations that are truly mental even though they are in themselves noncontentful, is perhaps the case of “grasping” a content or representation in thinking or understanding. It may be said [4] that this grasping is necessary for mentally contentful conscious thinking or understanding

to occur and that it cannot itself be thought of as something mentally contentful, on pain of regress (see Stroud 1991, 245). Grasping may therefore be proposed as an example of a B operation that is indubitably mental, although it is not itself intrinsically mentally contentful.

Some, however, may doubt the genuineness of the distinction between an episode or operation of grasping and a conscious, experiential episode of understanding. The former, it may be said, is an integral part of the latter. Alternatively, it may be said that if one stresses the necessity of episodes or operations of grasping, then one will have to be prepared to attribute experienceless versions of these graspings to computers that respond appropriately to commands, or to questions about London, say. It may then be insisted, with this parallel in mind, that automatic nonexperiential physical processes underlie grasping as much in the human case as in the computer case, that these processes, considered in themselves, are not distinctively mental in character, and, once again, that it is only the actual occurrence of experiential phenomena that is a distinctively mental occurrence.

Many complications are possible, but the basic set of options remains the same. One can continue to hold out for the view that all truly and distinctively mental phenomena are experiential phenomena. Or one can adopt a compromise position (see the fourth response on p. 147, and position (1) on p. 157) and say that even when B operations are described in way (1), they can still be counted as truly mental in cases where they go on in experiencing beings—even if relevantly identical processes can go on in experienceless beings and are not correctly counted as mental when they do. Or one can make a radical move in the opposite direction and allow that mental processes can go on in experienceless beings. Or one can simply refused to get involved in debates about the meaning of ‘mental’.

Two main claims have been considered in this section. First, that *mental* implies *intrinsically mentally contentful*. Second, that *intrinsically mentally contentful* implies *experiential*. Both claims can be challenged, both can be defended. In the end, the view that the only distinctively mental phenomena are experiential phenomena deserves serious respect. For many purposes, it is a very good way of putting things. But the word ‘mental’ pulls in several directions.

I have no remedy for this indeterminacy, but no remedy is needed. It is enough to have some sort of map of the tendencies of the word. If this seems unsatisfying, it is worth remembering that the notion of the experiential is much more important than the notion of the mental when it comes to the mind-body problem, and that the notion of the experiential has none of this indeterminacy.

