REPRESENTING BODIES

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Abstract

According to the bodily awareness thesis (BAT), awareness of one's own body is a necessary condition for the acquisition and possession of concepts of primary qualities such as force and shape. I discuss two arguments for this thesis. The acquisition argument for BAT focuses on the role of bodily sensation and action in the acquisition of the concept of force. I suggest that this argument requires us to conceive of the content of sensation as both representational and non-conceptual. The objective reality argument for BAT claims that awareness of one's own body is an essential component of those experiences which are required for a proper grasp of concepts of primary qualities. I conclude by arguing, in opposition to Sartre and Merleau-Ponty, that there is no incoherence in the idea that one's body is a thing among other things.

I

In his *Essay*, Locke proposes that what makes something a 'body' is its possession of primary qualities. What Locke describes in this context as a 'body', we might prefer to describe as a 'material object'. In Locke's sense of 'body', mountains and suitcases are bodies. Sounds, holograms and shadows are not. The qualities which Locke identifies as primary are solidity, extension, figure, motion or rest, and number. Of these, solidity is said to be the most important or fundamental primary quality, the one that is 'most intimately connected with and essential to Body' (1975: 123).

Given that what makes an object a material object is its possession of primary qualities, it is plausible that in order to think of an object as a material object one must think of it as something with primary qualities. Since one cannot think of something as a possessor or bearer of primary qualities unless one has concepts of primary qualities, it would be worth giving some thought to the conditions under which it is possible for one to acquire and grap such concepts. I want to examine the thesis that awareness of

one's own body is a necessary condition for the acquisition and possession of concepts of primary qualities. I will call this thesis the *bodily awareness thesis*, or BAT for short. If, as I believe, BAT is along the right lines, then we should conclude that awareness of one's own body is a necessary condition for thinking of objects as material.

To think of an object as a material object is not just to think of it as a bearer of primary qualities. It is also to think of it as one among many such things. The question which this raises is whether one can think of one's own body as an object in this sense. At one point, Merleau-Ponty characterizes one's own body as a 'sensible sentient' (1968: 137), as something which sees and touches as well as something which can be seen and touched. A familiar claim is that that which sees and touches cannot properly be thought of as a 'thing among other things' (Sartre 1989: 304). If this claim is correct, there would be an important sense in which one cannot think of one's own body as an object and therefore as a material object. I will be arguing that this conclusion is mistaken. The most that can be concluded from the fact that one's own body is a sensible sentient is that one cannot think of it as what might be called a 'mere' body. My claim will be that thinking of one's own body as a material object among material objects need not be a matter of thinking of it as a 'mere' body.

II

Before going any further, more needs to be said about Locke's account of primary qualities. The plausible thought which underpins this account is that our most basic notion of a material object is that of a bounded, three-dimensional space-filler. To fill a region of space is to exclude other bodies from that region of space. For Locke, solidity is the most fundamental of the primary qualities because it is in virtue of their solidity that material objects fill space. In the words of the *Essay*, the solidity of a body consists in an 'utter Exclusion of other Bodies out of the space it possesses' (1975: 125). Figure and extension can be seen as primary qualities of bodies that are consequential upon their solidity.

Is Locke right to regard solidity as the primary quality which is most intimately connected with and essential to the body? In his *Metaphysical Foundations of Natural Science* Kant argues that 'matter fills a space only by moving force', that is, 'by such a force as

resists the penetration, i.e. the approach, of another matter' (1985: 499). To suppose that the property of matter by which it fills a space is solidity is to suppose that matter fills its space 'by its mere existence' (1985: 497). In contrast, Kant's proposal is that 'only when I attribute to that which occupies a space a force to repel every external movable thing that approaches it, do I understand how a contradiction is involved when the space which a thing occupies is penetrated by another thing of the same kind' (1985: 498). Thus, the moving force by which matter fills a space is repulsive force. Impenetrability is 'given immediately with the concept of matter' (1985: 509), and the impenetrability of matter is a consequence of its repulsive force. Since material objects are composed of matter, and repulsive force belongs to 'the essence of matter' (1985: 511), an important part of what it is to be a material object is to be something which exerts repulsive force.

Is this a claim which Locke would dispute? Although force is not one of Locke's primary qualities, it is worth remembering that Locke connects solidity with impenetrability and that he represents the impenetrability of bodies as consisting in their possession of what Kant would call repulsive force. On the other hand, Locke's considered view is that the impenetrability of bodies is a consequence of their solidity.² To be more precise, Locke's idea is that impenetrability is a power and that solidity is the categorical ground of this power. This is what Kant rejects. He regards repulsive force as a fundamental force which cannot be further explicated. In particular, it cannot be explicated by reference to what Locke calls solidity. For Kant, Lockean solidity is an occult quality which cannot intelligibly be regarded as the categorical ground of impenetrability.³

In the present context, it is not important to decide whether Kant is right to be so dismissive of the proposal that solidity is the ground of impenetrability. What is important is the idea that part of what it is to be a material object is to exert some degree of force. Repulsive force is, however, not the only force which material objects exert. It is also plausible that for something to be a material object is for 'changes in its states of motion to be explicable by the mechanical forces acting upon it, and for changes in its motion to exert such forces' (Peacocke 1993: 170). On this

¹ See Warren 2001 for an illuminating discussion of Kant's proposal.

² See Locke 1975: 123.

³ For more on this aspect of Kant's thinking, see Warren 2001: 103-6.

mechanistic conception of force bodies have force insofar as they are in motion. In contrast, Kant thinks of repulsion as a 'dynamical' rather than as a mechanical force. In the words of one recent commentator, dynamical forces such as repulsion and attraction are ones which bodies have 'independent of their states of motion or rest' (Warren 2001: 111). The fact remains, however, that if primary qualities are the intrinsic or fundamental properties of material objects as such, then force, whether mechanical or dynamical, is a primary quality. By the same token, to think of an object as a material object is to think of it as something which exerts, and is subject to, the appropriate forces. This is the basic insight which I wish to extract from my discussion of Locke and Kant.

What is the bearing of this insight on BAT? If force is a primary quality, then one cannot think of an object as material unless one has the concept of force. How, then, is the concept of force acquired? It is in connection with this question that an argument for BAT begins to emerge. The first thing to notice is that there is, as Peacocke remarks, 'such a thing as the sensation of force. It is experienced when, for instance, a heavy book is resting on your lap and pressing downwards' (1993: 172). In addition to the bodily sensation of force or pressure, there is also 'the state of consciously exerting a greater or lesser force with one of your own limbs' (ibid.). Thus, to quote Peacocke once again, 'it seems that either sensation or action may each in principle provide routes to the acquisition of a conception of force (if it is acquired)' (ibid.).

Suppose, next, that it can be shown that sensation and action are not just possible routes to the acquisition of the concept of force but that they are the *only* possible routes to the acquisition of this concept. We can then point out that only an embodied being could have bodily sensations of force or pressure, or be conscious of exerting greater or lesser force with one of its own limbs. It is not just that one must *be* embodied in order to acquire the concept of force but also that one must be aware of oneself *as* embodied in order to acquire this concept. In being conscious of exerting some force with one's body or of the forces acting on one's body, one cannot fail to be aware of one's own body. One cannot fail to be aware of oneself as a bodily being. So if bodily sensation and action are the only possible routes to the acquisition of the concept of force, then awareness of one's own body is,

⁴ For a closely related suggestion, see Peacocke 1993.

as BAT implies, a necessary condition for the acquisition of this concept. I will call this the *acquisition argument* for BAT.⁵

Just as awareness of one's own body might be said to be a necessary condition for the acquisition of the concept of force, so it might be held that such awareness is also a necessary condition for the acquisition of other primary quality concepts. For example, Kant suggests in his Metaphysical Foundations of Natural Science that 'by means of the sense of feeling', matter's property of filling space 'provides us with the size and shape of an extended thing, and hence with the concept of a determinate object in space' (1985: 510). To feel an object is to be in contact with it, and the contact which is at issue here can only be bodily contact. A closely related point emerges from Kant's Anthropology From a Pragmatic Point of View. In that work, Kant suggests that nature has given man the sense of touch so that 'by feeling all the sides of a body he could form a concept of its shape' (1974: 34). In the absence of this sense, 'we should be unable to form any concept at all of the shape of a body' (ibid.). Since tactile awareness of another body requires awareness of one's own body, this implies that awareness of one's own body is a necessary condition for the acquisition of the concept of shape. So here we have another application of the acquisition argument for BAT.

How good is the acquisition argument? As far as the concept of force is concerned, one question which this argument raises is whether bodily sensation and action are possible routes to the acquisition of the concept of force. Another question is whether bodily sensation and action are the only possible routes to the acquisition of the concept of force. On the first of these questions, one difficulty is that primary qualities are supposed to be mind-independent properties of bodies. One sense in which primary qualities are mind-independent is that they are properties which exist independently of being perceived. As Locke describes them, 'they are in the things themselves, whether they are perceived or no' (1975: 141). Another sense in which primary qualities are mind-independent is that the things which possess them need not be, or have, minds. This is another way of saying that among the things which we usually think of as possessing primary qualities whether we perceive them or not are inanimate

⁵ There is a brief discussion of this argument in Cassam 1997: 81–3. Strictly speaking, the acquisition argument is only an argument for one component of BAT, for the claim that awareness of one's own body is a necessary condition for the acquisition of the concept of force.

objects. So if force is a primary quality, then to have the concept of force is to have the idea of a property which is mind-independent in both of these senses. This means that the bodily sensation of pressure or consciousness of exerting force with one of one's own limbs can be the source of our concept of force only if it is possible to derive the idea of a mind-independent property of bodies from these sources. The most serious objection to the acquisition argument is that it fails to explain how this is possible. It fails to explain how the bodily sensation of pressure can provide one with the idea of unsensed or unperceived forces. Equally, it fails to explain how consciousness of exerting force with one of one's own limbs can give one the idea of forces which are capable of being exerted by inanimate objects. The problem, it seems, is that we cannot conceive of forces which no one senses or is conscious of exerting on the model of forces which we do sense or which we are conscious of exerting.6

Similar considerations apply to what the acquisition argument says about our acquisition of the concept of shape, for it is difficult to see how feeling all the sides of a body can give one the idea that shapes can exist unfelt. In effect, this is Berkeley's objection to Locke's account of the source of our ideas of primary qualities. Locke thinks that sensation is the source of such ideas but Berkeley's point is that sensation cannot give us the idea of a property of objects which can exist unsensed. Berkeley's conclusion was that the very idea of a primary quality in Locke's sense is unintelligible from an empiricist perspective. The acquisition argument for BAT simply asserts that sensation is a route to the acquisition of concepts of primary qualities but it does not address Berkeley's objection to this proposal. It neither responds to this objection nor attempts to defuse it.

One way of attempting to defuse Berkeley's objection would be to argue that it relies on an unacceptable picture of the nature of experience or sensation. For a better account, it might seem that we need to introduce the idea of an intuitive mechanics.⁷ For in order to grasp a primary quality concept, such as shape or mechanical force, it is plausible that one must be capable of engaging in various forms of spatial and mechanical

⁶ As Peacocke puts it, if 'a sensitivity to sensations were all that is involved in having a conception of force, conceiving of forces no one experiences would be none too easy a thing to do: you would have to conceive of something felt by no one on the basis of sensations you *do* feel' (1993: 173).

⁷ See Peacocke 1993 for more on this idea.

reasoning.⁸ In engaging in these forms of reasoning, one must employ the principles of an intuitive or primitive mechanics. For example, one must grasp principles which connect the force which material objects exert with their weight and motion, as well as principles which connect the behaviour of material objects with their shape. On one view, the principles of an intuitive mechanics will also include the principle that primary properties persist through gaps in observation.⁹ If this proposal is along the right lines, then one will be able to conceive of primary properties as capable of existing unperceived as long as one's concepts of such properties are embedded in an intuitive mechanics. Without the appropriate intuitive mechanics, one would not be in a position to make sense of the notion of existence unperceived.

How does any of this help to defuse Berkeley's objection to the view that concepts of primary qualities can be extracted from sensation? One suggestion is that this objection is only compelling if it is read as making the point that concepts of mindindependent properties cannot be extracted from what Peacocke calls 'uninterpreted sensations' (1993: 173). For present purposes, uninterpreted sensations are ones which one could have without already having an intuitive mechanics. In contrast, interpreted sensations presuppose one's possession of an intuitive mechanics. From the fact that concepts of mind-independent properties cannot be extracted from uninterpreted sensations, it should not be concluded that sensation is not a possible route to the acquisition of the concept of force. The correct conclusion is that the sensations from which the concept of force can be extracted must be interpreted sensations. An impoverished conception of the deliverances of sensation is bound to cast doubt on the idea that sensation can be the source of concepts of primary qualities, but the lesson is surely that a viable empiricism must operate with a robust conception of what sensation delivers.

The obvious problem with this line of argument is that it fails to explain our acquisition of those principles of spatial and mechanical reasoning which constitutes one's intuitive mechanics. Since uninterpreted sensations cannot be the source of these principles, it would seem that the only empiricist alternative is to

⁸ There is an influential defence of this proposal in Evans 1980. Evans argues that in order to grasp the primary properties of matter one must 'master a set of interconnected principles which make up an elementary theory – of primitive mechanics – into which these properties fit and which alone gives them sense' (1980: 95).

⁹ See Evans 1980: 95.

regard interpreted sensations as their source. Yet interpreted sensations are, by definition, such that they presuppose one's possession of an intuitive mechanics. How, in that case, can sensations of this type be the source of one's intuitive mechanics? If interpreted sensations presuppose one's possession of an intuitive mechanics, and one's intuitive mechanics incorporates the idea that there are certain properties which are capable of being perceived and of existing unperceived, then we are none the wiser as to the source of this idea. Indeed, to the extent that neither interpreted nor uninterpreted sensations can be its source, it would be tempting to conclude that it must be an innate idea, and therefore one which does not have its source in experience or sensation.

In fact, this is not quite right. The discussion so far assumes that sensations must either be uninterpreted or internally connected with an intuitive mechanics, but these are not the only possibilities. Another possibility would be to view sensations as intrinsically intentional or representational psychological occurrences which do not presuppose one's possession of an intuitive mechanics. Understood in this way, sensations represent objects as possessors of mind-independent primary qualities such as force and shape, but it is possible for sensations to have this representational content even if they are not, in Peacocke's sense, interpreted. If uninterpreted sensations are not intrinsically intentional, then it is no surprise that concepts of mind-independent primary qualities cannot be extracted from them. If, on the other hand, uninterpreted sensations are representations of mind-independent primary qualities and are uninterpreted only in the sense that they are enjoyable without any prior grasp of an intuitive mechanics, then it is no longer a mystery how they can provide a route to the acquisition of concepts of such qualities. On this interpretation, the sense in which many empiricists operate with an unacceptably impoverished conception of what sensation delivers is not that they fail to see that sensations must be interpreted. It is that they fail to see that sensations can be representational without presupposing our possession of the very concepts whose acquisition empiricism is attempting to explain.

The question which now arises is whether we really understand how sensations which are 'enjoyable without possession of an intuitive mechanics' (Peacocke 1993: 172) can be genuinely representational. Suppose that we think of interpreted sensations as ones whose representational content is a form of conceptual content.¹⁰ In these terms, what I have just been suggesting is that it is sensations whose content is representational without being conceptual which provide a route to the formation of concepts of mind-independent primary qualities. So what is now needed is, among other things, a defence of the view that there can be non-conceptual representational content. Perhaps the most promising defence of this view from an empiricist perspective would be to point out that it is only intelligible that concepts can be derived from experience or sensation if we suppose that not all sensory content is conceptual.¹¹ In particular, unless we are prepared to view concepts of primary qualities as innate, we must concede that there are experiences which do not presuppose them. This is just another way of saying that we must concede that the representational content of experience need not be wholly conceptual.

This amounts to a transcendental argument to the effect that the existence of non-conceptual representational content is a necessary condition for concepts, including concepts of primary qualities, to be derivable from experience. One worry about this argument is that it begs an important question by assuming that concepts of primary qualities are derivable from experience. Another is that the transcendental argument does not explain how intrinsically intentional sensations can be non-conceptual. It argues that there must be sensations which are both representational and non-conceptual but it does not say how this is possible. For example, it does not explain how sensations of pressure which are enjoyable without any prior grasp of an intuitive mechanics can represent sensed forces as capable of existing unsensed. To this extent, the transcendental argument for non-conceptual representational content cannot be the end of the story, even if one grants its empiricist presuppositions.

Any serious account of the nature and possibility of nonconceptual representational content would need to address questions in the theory of content which go well beyond the scope of the present discussion. As far as this discussion is concerned, the important point to have emerged is that if it makes sense to think

¹⁰ For present purposes, the representational content of an experience or sensation is conceptual if its subject must possess those concepts which are required to specify its content. Its content is non-conceptual if the concepts required to specify its content are ones which are not, or need not be, possessed by its subject. For more on the notion of non-conceptual representational content, see Evans 1982, Bermúdez 1998, and Peacocke 2001.

¹¹ For a closely related line of argument, see Bermúdez 1998: 58–62.

of sensations as non-conceptual representations of primary qualities, then Berkeley's objection to the acquisition argument is inconclusive. In principle, we can still think of concepts of primary qualities as formed from sensations as long as we refrain from thinking of sensations either as non-representational or as presupposing concepts of primary qualities. From an empiricist perspective, what is controversial about the acquisition argument for BAT is not its assumption that the concept of force can be acquired from sensation or action but its assertion that awareness of one's own body is a necessary condition for the acquisition of this concept. So the question which now needs to be addressed is whether bodily sensation and action are the only possible routes to the acquisition of the concept of force.

Empiricists who are sceptical about BAT might argue that action cannot be a strictly necessary condition for the acquisition of the concept of force since what H.H. Price calls a 'purely contemplative being' (1932: 275), one that is incapable of physical action, might still be capable of acquiring this concept. A common reaction to this proposal is to insist that such a being could only acquire the concept of force as long as it can still experience bodily sensations of force or pressure. But now suppose that its nerves are damaged in such a way that it cannot experience bodily sensations of force. If, in the absence of such sensations, a purely contemplative being can still acquire the concept of force, then it is doubtful whether awareness of one's own body is a strictly necessary condition for the acquisition of this concept.

How exactly is a purely contemplative being which lacks sensations of force supposed to have acquired the concept of force? Suppose that we agree with the mechanist that the force of a body in motion is exercised or manifested when it collides with another body, thereby causing a change in the state of motion of that other body. On the assumption that even a purely contemplative being can still see other bodies as colliding and deflecting, a natural suggestion would be that this amounts to a purely visual experience of mechanical force, a type of experience from which the concept of mechanical force can be extracted even by creatures which lack awareness of their own bodies. What we have here, therefore, is an apparent counterexample to the thesis that awareness of one's own body is essentially involved in *all* of the different kinds of experience from which the concept of force can be derived. The most that can plausibly be said is that aware-

ness of one's own body is involved in *some* of the experiences from which this concept can be derived.

A Humean response to this line of argument would be to object that the concept of force is not exemplified in visual experience, but this response does not seem to be correct. We can indeed see objects as exerting and being subject to mechanical forces. To borrow an example of Strawson's, 'in a great boulder rolling down the mountainside and flattening the wooden hut in its path we see an exemplary instance of force' (1992: 118). In the light of this and other such examples, it would not be plausible to insist that the concept of force is not exemplified in visual experience. And if the concept of force is exemplified in visual experience, then there is no reason to deny that the concept of force can be extracted from visual experience.

The suggestion that the concept of force can be extracted from visual experience only poses a threat to BAT on the assumption that visual experience does not presuppose awareness of one's own body. This assumption is, however, open to question since it is arguable that there is no such thing as a visual experience which does not involve some awareness of one's body. Visual experience involves visual sensations, and visual sensations are, like all sensations, bodily occurrences. More generally, as Ayers remarks, our visual awareness of things in space 'involves some awareness of the relation which they bear to the part of us from which we see', and this awareness is 'integrated with, indeed involves, our general tactile and proprioceptive awareness of the head and its relation to the rest of the body' (1991: 187). The fact that the concept of force can be extracted from visual experience therefore poses no immediate threat to BAT.

It also needs to be recognized that sight is normally integrated with the other senses and with the capacity for action. This leads to the idea that only a creature with a sense of touch and the ability consciously to exert force with its own body can properly be said to see other bodies as exerting and being subject to mechanical forces. The suggestion here is that if it were not for one's own bodily engagement with the world, there would be nothing in virtue of which it would be correct to say that force enters into the intentional content of visual experience. The intentional content of visual experience is, to this extent, determined by the complex relations that exist between visual perception and our other perceptual and active capacities. On this account, a being which has no bodily engagement with the world would have no

impression of force, not even a purely visual impression. In contrast, we can see objects as exerting and being subject to mechanical forces because mechanical force is not something which we are only aware of visually.

According to this line of argument, there is good reason to question the coherence of the hypothesis of a purely contemplative being that has no awareness of its own body but which is still capable of enjoying visual experiences which resemble the visual experiences which we enjoy. Our visual experiences are, in the first instance, experiences with spatial content, and the spatial objects which we are aware of as such are, for the most part, also ones which we can touch. As Merleau-Ponty puts it, 'visible and tangible belong to the same world', and 'every vision takes place somewhere in the tactile space' (1968: 134). To imagine a being with no awareness of its own body is to imagine a being with no sense of touch and no capacity for physical action. To imagine a being with no sense of touch and no capacity for physical action is, however, to imagine a being whose visual experiences would be quite unlike ours. Indeed, it is open to question whether such a being could even be said to have visual experiences with determinate spatial content, let alone visual experiences which present themselves as experiences of force. So we should not make the mistake of taking the fact that our visual experiences have a certain intentional content to show that a being with no awareness of its own body could have visual experiences with the same intentional content.

In arguing in this way, it should not be forgotten that there are actual human beings who suffer from various forms of what might be called 'body-blindness'. There is, for example, the well-documented case of a person who has no touch or proprioception below the neck but who is apparently still capable of seeing the world more or less as the rest of us do. 12 Yet this is still not a case of someone with no awareness of his own body seeing the world as we do. The subject in this case is only partially body blind and can still act in the world. He can lift things and is aware of the effort which he puts into doing so. He has the concept of force, but there is no reason to suppose that his route to this concept did not involve awareness of his own body. So BAT remains intact.

The thesis for which I have been arguing is similar to a thesis for which W. Joske argues in his book *Material Objects*. Joske's thesis is that 'our appreciation of the fact that we live in a world

¹² The case which I have in mind is the one described in Cole 1991.

in which material things are common is dependent upon awareness of our own body' (1967: 18). The basis of this thesis is the thought that solidity or impenetrability is the defining property of matter, and that we are aware of solid objects 'because we can move our limbs and body, and know that such movements are being resisted' (ibid.). In response to the suggestion that an inactive being with the sense of sight could still be visually aware of impenetrability just as we are, Joske argues that this presupposes that such a being already has the *concept* of solidity. This concept might be available to an inactive being, but only if it has the capacity to feel sensations of pressure and collision. To this extent, it remains the case, according to Joske, that 'without an awareness of our own body, at least as the seat of sensations, we would have no proper concept of solidity at all' (1967: 20), and so would be unable to detect solidity with our eyes.

Much of this is highly congenial to what I am arguing here, but there are important differences. One important difference is that the emphasis in Joske's account of what it is to be a material object is on the notion of solidity rather than that of force. Another difference is that on Joske's account only someone with the concept of solidity can see things as solid. Since I do not wish to commit myself to the view that intentional content is conceptual, my claim is not that only someone with the concept of force can see things as exerting and being subject to forces. For Joske, seeing objects as material requires awareness of one's own body because awareness of one's own body is required to establish the concept of solidity. On my view, seeing objects as material requires awareness of one's own body because awareness of one's own body is part and parcel of the other perceptual and active capacities with which the capacity to see objects as material must be integrated. Awareness of one's own body is required to establish the concept of force, but this is not the basis of my proposal that seeing objects as material requires awareness of one's body.

Before concluding this phase of my discussion, there is one more issue which needs to be addressed. At several points in my exposition of the acquisition argument for BAT, I have referred to the possibility of regarding concepts of primary qualities as innate. A concept is innate just if it is possessed without having been acquired. Since innate concepts have not been acquired,

¹³ This characterization of what it would be for a concept to be innate is drawn from Bennett 1966: 98.

they have not been acquired from experience. So even if it is true that bodily awareness is a necessary condition for the *acquisition* of concepts of primary qualities from experience, it does not follow from this that bodily awareness is a necessary condition for the *possession* of such concepts. This does not follow because these concepts might be possessed without having been acquired. And if bodily awareness is not a necessary condition for possession of concepts of primary qualities, then it would seem that awareness of one's own body is not a necessary condition for thinking of objects as material.

One thing that might be said in response to this line of argument is that the best case for regarding a given concept as innate is that we cannot understand how that concept could have been acquired from experience. Hence, as long as the notion of nonconceptual representational content makes it intelligible that concepts of primary qualities can be derived from experience, this counts against the view that these concept are innate. Still, it must be conceded that nothing that I have said shows that it would be strictly incoherent to regard concepts of primary qualities as innate. The lesson is that a convincing argument for BAT cannot content itself with pointing out that awareness of one's own body is essentially involved in those kinds of experience from which it is possible to acquire the concept of force. The acquisition argument for BAT might convince empiricists who believe that the concept of force must be acquired, but it should not convince nativists who think that this concept is not, or need not be, acquired.

It would be helpful to remember at this point that BAT is not just the thesis that awareness of one's own body is a necessary condition for the acquisition of concepts of primary qualities. It is also the thesis that awareness of one's own body is a necessary condition for the possession of concepts of primary qualities. If this were not the case, BAT would not licence the conclusion that awareness of one's own body is a necessary condition for thinking of objects as material. If, on the other hand, awareness of one's own body turns out to be a necessary condition for the possession of concepts of primary qualities, then even nativists must concede that a thinker with no awareness of her own body would be unable to think of objects as material.

In brief, the case for insisting that possession of concepts like force and shape requires awareness of one's own body is this: like other concepts of primary qualities, these are concepts which someone who has them must be in a position to apply on the basis of experience. This means that a thinker who has shape concepts must be able to perceive the shape of things and apply the appropriate shape concept on the basis of her experiences of shape. Equally, possession of the concept of force is bound up with the capacity to perceive or exert some degree of force. There are, of course, concepts which are not tied to experience in this way, but one's concepts of primary qualities would lack what Kant calls *objective reality* if it were not for the fact that instances of them are given as such in experience.

This is the point at which awareness of one's own body comes into the picture. In the acquisition argument for BAT, awareness of one's own body figures as an essential component of those experiences from which concepts of primary qualities are acquired. The present suggestion is that awareness of one's own body is an essential component of those experiences of primary qualities which provide one's concepts of primary qualities with objective reality. A thinker who has never had any experience of shape or force is one who has no proper conception of shape or force. The point is that there are ways of thinking about shape and force which are, as Peacocke remarks, 'made available by certain kinds of conscious experience' (1993: 173). Thinkers who lack these kinds of conscious experience cannot think in these ways, and thinkers who cannot think in these ways cannot be credited with concepts of these primary qualities. In deference to Kant, I will call this the *objective reality argument* for BAT.

Among the many questions raised by this argument, one concerns the validity of the objective reality requirement itself. Concepts have objective reality if and only if they have 'application to objects which can be given to us in intuition' (B150). Kant's proposal is that concepts which cannot, in this sense, be 'made sensible' (A240/B299) are empty or insignificant. Although some concepts which lack objective reality might retain a meaning which is 'purely logical' (A147/B186), the meaning of concepts of primary qualities cannot be purely logical. In the absence of any relation to experience, they would be 'without sense' (A240/B299). This is not to deny that a thinker might lose

¹⁴ All references in this form are to Kant 1933.

 $^{^{\}rm 15}$ In the Schematism, the concepts which Kant describes as retaining a purely logical meaning 'even after elimination of every sensible condition' (A147/ B186) are the categories.

¹⁶ The concepts which Kant is discussing at this point are those of mathematics.

her ability to experience primary qualities while retaining her concepts of such qualities. To this extent, we can allow that a thinker who gets into a state of body-blindness or total sensory deprivation might retain her ability to think of objects as material. But it only makes sense to think of someone *retaining* an ability if she had it in the first place, and the point of the objective reality requirement is to insist that one cannot grasp concepts of primary qualities without ever having been in a position to experience their instances.

The implication of this discussion is that the sense in which awareness of one's own body is a necessary condition for thinking of objects as material is not that one must *always* be aware of one's own body in order to think of objects as material. The suggestion is rather that in order to think of objects as material, one must *sometimes* be aware of one's own body. This is so because one cannot think of objects as material unless one has concepts of primary qualities, one cannot have concepts of primary qualities without any experience of primary qualities, and one cannot experience primary qualities without any awareness of one's own body. As far as the objective reality argument is concerned, this is the best that can be done for BAT. It is one thing to draw attention to the connections that exist between experience, bodily awareness and concepts of primary qualities, but proponents of BAT must also be careful not to exaggerate the tightness of these connections.

To sum up, I have considered two arguments for BAT, the acquisition argument and the objective reality argument. Neither argument is unproblematic and it has also emerged that BAT is, in some ways, a more modest thesis than it might have appeared at the outset. Nevertheless, the concessions made by the acquisition and objective reality arguments should not be allowed to obscure the central point of this discussion. The central point is that there is a complex story to be told about what is involved in the acquisition and grasp of concepts of primary qualities, and that neither our acquisition nor our grasp of these concepts can be satisfactorily accounted for without reference to our awareness of our own bodies. It is this awareness which, in conjunction with many other cognitive capacities, provides us with a concrete sense of the kind of world which we inhabit.

Ш

The remaining issue is whether we can think of our own bodies as

material objects. In so far as awareness of one's own body is required in order to think of objects as material, it is also required in order to think of one's own body as material. To think of one's own body as a material object is to think of it as a bearer of primary qualities and as a thing among other things. The first of these requirements is easily fulfilled. For example, there is little difficulty in thinking of one's own body as shaped and as exerting and being subject to mechanical forces. There is little difficulty in thinking of one's body in these terms because the forms of awareness which provide one with concepts of such primary qualities are also forms of awareness which provide one with a sense of one's body as shaped and as exerting and being subject to mechanical forces. For to be conscious of sensations of force is to be conscious of one's own body as something which is subject to force. To be conscious of exerting force with one's limbs is to be conscious of one's own body as an exerter of mechanical force. In each of these respects, one is conscious of one's own body as a locus of mechanical force and is thereby in a position to think of it as a material object.

A more difficult question is whether one can think of one's own body as a thing among other things, a material object among material objects. The problem is to reconcile the idea that one's body is a thing among other things with its role in sensation and perception. Among those who think that these two aspects of one's own body cannot be reconciled in one's thought about it is Sartre. He claims that one's body is either 'a thing among other things, or it is that by which things are revealed to me. But it cannot be both at the same time' (1989: 304). In other words, in representing one's own body as a subject of perception and sensation, one deprives oneself of the means to represent it as an object among others in the world. By the same token, one deprives oneself of the means to represent it as a material object.

One response to this argument would be to deny that it makes sense to regard one's own body as a subject of sensation and perception. Sensations, including those of force and pressure, certainly present themselves as having a bodily location, but this is not the same thing as saying that one's own body is, or presents itself as being, the bearer or subject of such sensations. As for the idea that one's body is something which sees and touches, as well as something which can be seen and touched, it might be objected that one's body is not literally the subject of one's visual and tactile perception. One's body is only what one uses in order

to perceive the surrounding world, but it is not that which perceives the surrounding world. As long as one's body is thought of as an instrument rather than as a subject of perception, there is no problem reconciling its role in perception with the idea that it is a thing among other things.

Someone who argues in this way can agree that there is a sense in which my body is that by which things are revealed to me. The present suggestion is that the sense in which this is so does not make it difficult to think of one's body as a material object. After all, even a Cartesian can accept that my body is that by which things are revealed to me without accepting that my body is the subject to which the things which I perceive reveal themselves. For Descartes, one's body is something possessed by the subject of one's experiences. Unlike the subject itself, it can easily be thought of as a material object, as a thing among other things and as a bearer of primary qualities. It is true that in experiencing sensations of force or in being conscious of exerting force with one's own limbs one cannot fail to be aware of oneself as embodied, but being aware of oneself as embodied need not be a matter of being aware of one's thinking, perceiving self as a material object.

Although I will not attempt to make the case here, I believe that this line of argument is mistaken and that it is indeed appropriate to think of one's own body as that which perceives the surrounding world rather than as a mere instrument of perception. What makes it difficult to think of one's body as that which perceives the surrounding world and as a bearer of sensations is the idea that one's body is a 'mere' body, a piece of inanimate physical matter. On this account, a purely instrumental conception of the role of the body in sensation and perception is hard to avoid. There is, however, an alternative to this way of thinking. The alternative is to insist that that which sees and touches is not a mere body but a living human body. 17 It is one's living body which can coherently be thought of as a constituent of one's subjectivity, as a point of occupancy for psychological properties. Yet, contrary to what Sartre maintains, the thought that one's living body belongs to the subjective order and is in this sense that by which things are revealed to me does not preclude the thought that this body is also a

¹⁷ For more on this alternative, see Cassam 1997: 56–61.

thing among other things. It does not preclude the thought that one's living body is a material object among material objects.

The possibility of thinking of one's living body both as a subject and as a thing among other things is one to which Merleau-Ponty draws attention when he describes our body as 'a being of two leaves, from one side a thing among things and otherwise what sees and touches them' (1968: 137). The suggestion that one's body has a 'double belongingness to the order of the "object" and to the order of the "subject" (ibid.) is Merleau-Ponty's suggestive gloss on the idea that one's body is a sensible sentient or what he describes elsewhere as a 'subject-object' (1989: 95). In so far as one's sentient body is what sees and touches, its role in perception is not just that of an instrument. In so far as it belongs to the objective order, it is a thing among other things. The mistake is to assume that it cannot be both at the same time.

I would not wish to suggest that these brief remarks constitute an adequate defence of the thesis that our bodies belong to the order of the subject and to the order of the object. The suggestion that our bodies, even our living bodies, belong to the order of the subject is one which is likely to meet with especially strong resistance. For present purposes, however, the more important claim is that our bodies belong to the order of the object, and that this is so even if they also belong to the order of the subject. If they do not belong to the order of the subject, then so much the worse for those who maintain that we cannot think of our bodies as objects among others in the world.

The position, then, is that whether one conceives of one's body as something which one uses to perceive the surrounding world or as that which perceives the surrounding world, there is no good reason to suppose that it cannot properly be regarded as a thing among other things. To this extent, there is no good reason to suppose that it cannot properly be regarded as a material object. As I have been emphasizing, the interesting and difficult question is not whether one can conceive of one's body as a material object but whether the forms of bodily awareness which make this conception available to us are ones which someone who possesses concepts of primary qualities can coherently be supposed to lack. If what I have been arguing is correct, then, with allowances for the possibility of partial or

temporary body-blindness, this question should be answered in the negative.

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