D. M. Armstrong – Bodily Sensations

Text

Introduction

• Many philosophers regard bodily sensations, like mental images, as a particular problem for a materialist theory of mind. Armstrong will argue that such sensations are nothing but bodily and tactual perceptions, where “perception” is taken to be compatible with a failure to correspond to physical reality. Perception involves acquiring states giving the capacity for certain sorts of discriminative behaviour, in this case behaviour towards one’s own body. This will provide an account of bodily sensation compatible with, though not entailing, a purely materialist account of man.

• This account is similar to Armstrong’s 1962 monograph Bodily Sensations, though he has now repudiated the view that first-person accounts of current mental states are incorrigible and developed useful views on secondary qualities.

I. Tactual and Bodily Perception

• We begin with an account of touch and bodily perception, for which English uses a common word ‘feel’.

• Touch provides information about our body and material environment, with bodily perception focused on one particular material object, our own body. Our legs can feel the pressure or roughness of a bandage, as can our fingers moving over it – this is the feeling of touch. We feel in the other sense, ie. by bodily sensation, that our cheeks are hot, limbs moving or heart pounding. The usage of ‘feel’ differs not only in the objects towards which the perceptions are directed, but the real distinguishing feature is that, in the case of touch, it makes sense to ask what we felt the object with (the finger, the tongue), but not in the case of feeling the cheeks to be hot or the limbs to be moving.

• Bodily perceptions are peculiar in being private to each perceiver. I can become aware of some things going on in my body without the aid of the usual five senses, but not in the case of other people’s bodies. This is an empirical matter, for this privacy would vanish if my nervous system were suitably wired up to other bodies. Armstrong has already suggested that bodily perception consequently models the nature of introspection.

II. Bodily Sensations and Bodily Feelings

• Armstrong distinguishes bodily sensations from bodily feelings, though there are close resemblances and intermediate cases. His examples of the former are pains, itches and the like, together with sensations of pressure, warmth or movement; those of the latter are feeling tired, hungry, fresh, etc. Bodily feelings involve sensations, though aren’t them.

1 Chapter 14 of A Materialist Theory of Mind.
2 Not that it’s relevant here, but touch receives a different treatment from the other four senses in this chapter, as it is the way in which (in one sense of the term) we feel.
3 There’s an exam question related to this – whether we could feel pain in someone else’s body.
4 Where?
Bodily sensations are distinguished from bodily feelings by being located in particular parts of the body. Mostly this is clear, but there are fine distinctions; hunger pangs can be located but not feelings of hunger.

This latter distinguishing characteristic can be challenged. We do talk of feeling tired in parts of the body, though not in the precise way that sensations are located. More seriously, we talk of sensations (say of giddiness) without giving them a location. Armstrong claims these as borderline cases straddling his division. He now puts bodily feelings to one side until Section VIII.

III. “Transitive” Bodily Sensations

Armstrong makes a further distinction, this time between two kinds of bodily sensation. A distinction can be made between heat and the sensation of heat, but not between a pain and the sensation of a pain. My hand can be objectively hot but not feel so in my hand, and vice versa; and similarly for pressure or motion. However, a tingle just is a sensation of tingling, and similarly for pains, itches and tickles.

Armstrong calls sensations of the first sort transitive and those of the second sort intransitive, though he will argue that intransitive sensations have concealed transitivity. His reason for separating them is that transitive sensations are easier to deal with and serve as a model for the treatment in intransitive sensations.

A transitive sensation is no more than to feel that your hand is hot, though this may or may not correspond to physical reality. The same goes for sensations of back pressure or knees bent. The feeling is all there is to it; there may or may not by an underlying physical cause. We could analyse transitive sensations as for other perceptions, if they are nothing but bodily and tactual perceptions, as mental events resembling belief acquisition. We become, as a consequence, able to behave in a discriminating way towards our own body and things in contact with it – such as when we determine that parts of our body are at an unusually high temperature and require removal from a source of heat.

Locations of bodily sensations are intentional locations, in that they seem to have a particular location. This is similar to visual impressions where the image looks to be behind the mirror, though we know it isn’t. Treating transitive sensations as intentional offers a simple explanation of transitive sensations in phantom limbs. We can analyse the case of an amputated arm feeling hot as: it feels to me that I have an arm and, on occasion, it feels to me as though the ‘hand’ on this ‘arm’ is unusually hot. These are real bodily perceptions that correspond to nothing in the physical world and of whose hallucinatory nature I’m aware. A phantom limb is a bodily phantom much as an image in a mirror is a visual phantom.

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5 This reminds us of Locke’s arguments about secondary qualities not being in the object, but in the perceiver.
6 The distinction seems to be an objective / subjective one rather than a distinction between subject and object; check on this later.
7 The last sentence is my interpretation.
8 I’m not clear why Armstrong uses this term.
9 I’m suspicious that Armstrong has missed out the “what it is like” of bodily sensation.
IV. Problems about “Intransitive” Sensations

- Can we give the same simple account for intransitive sensations? If we can, says Armstrong, there will be no special problems for bodily sensation, as it will have been reduced to perceptions of bodily state (albeit possibly illusory perceptions). Armstrong thinks this is possible, but states the problems in this section, addressing them later.

- The first, and less serious problem, is that, in the paradigm case, though not always in the case of mild pains, intransitive sensations involve reactions on the part of the subject. Reaction is not to be taken behaviouristically; it need not involve a conscious change of mental state, and may not lead to action.

- It is of the essence of pains that we don’t like them, though may be willing to put up with them for a greater good. Similarly, erotic sensations are intrinsically pleasurable, itches demand scratches and hunger pangs involve a desire to eat. Armstrong thinks this reactive response is typically the case, though not for tingles.

- Since perceptions are passive, how can they involve reactions? They involve acquiring capacities for, but not impulses towards, discriminative action.

- Armstrong thinks this is easy to answer. However, the second difficulty is more complex. All perceptions involve a distinction between appearance and physical reality. Felt pressure and felt motion are pressure-perceptions and kinaesthetic-perceptions, which can correspond to physical reality or not. Doesn’t the intransitivity of sensations of pain defeat our attempts to treat them as perceptions since we cannot distinguish between felt and actual pains. A felt pain is an actual pain, while an un-felt pain is nothing. Armstrong had allowed, in Chapter 6, that we can be unconscious of, or in error about, any mental state whatever. This, however, is different because, for example, a feeling of pressure is simply a sensation of pressure, which may be an unconscious tactual or bodily perception. Armstrong says this is the same for pain, which we may be unaware of feeling. But, there is still a difference between feelings of pain and of pressure, in that the former defy attempts to treat them as perceptions, because, unlike the latter, they don’t point to anything.

V. “Intransitive” Sensations and Reactions

- So, does the link between intransitive bodily sensations and reactions bar them from being perceptions? Armstrong claims that such sensations are portmanteau-concepts, involving both a proper sensational component – the bodily perception – and a reaction of the mind to this sensation. The linkage is causal, with the bodily perception evoking the reaction. One mental event brings about another; a perception brings about an affection. This almost invariable connection accounts for why we normally consider the whole causal sequence as one concept. In the case of pain, a perception of an event in a certain part of the body occurs, which immediately evokes a peremptory desire for the perception to cease. In the case of pain in phantom limbs, this perception fails to correspond to reality.

10 Really? No unpleasant reaction? Depends on the intensity.
11 I’m not sure of this. Can there not be such a think as unconscious pain (that we are distracted from) but which nevertheless has a wearing effect on us?
12 Actually, it looks as though he may have denied this! Read the chapter!
• This ‘perception evoking reaction’ analysis fits well with the cases whereby chronic pain can sometimes be relieved by severing the connections between the prefrontal lobes and the rest of the brain. Patients report the curious result that, while the pain is still there, it doesn’t worry them any more – as though they had pain which gave them no pain! According to our analysis, the explanation is simply that the perception is there but the reaction has been abolished by the operation. The patient still perceives the same thing to be going on in his body, but this now causes him no concern.

• A similar analysis explains why very mild itches and such like occur without reaction. Characteristically, such a perception would provoke a reaction, this particular perception is insufficient to do so.

• Armstrong points out the importance of noting that it is empirically true to say that reaction to perception is unaffected by our knowledge that the perception involved does not correspond to the physical facts. Pain in phantom limbs causes as much pain as that in real limbs. Armstrong’s analysis is that a non-veridical perception, though one unaccompanied by false belief, of bodily happenings in the place where the limb was still evokes a mental reaction.

• Armstrong discusses in Bodily Sensations the reactions typically invoked by the various intransitive bodily sensations.

VI. “Intransitive” Sensations as Bodily Perceptions

• The main problem in construing intransitive bodily sensations as bodily and tactual perceptions is the lack of a distinction between felt pain and real pain, and so on, corresponding to the distinction between feeling hot and being hot, and so on. How do pains, like other perceptions, fail to correspond to physical reality?

• Armstrong’s answer is that, while there is no distinction between felt and real pain, we can translate without loss of meaning a report of pain into a perceptual statement. So, Armstrong means that a statement such as “I have a pain in my hand” translates as “I have a perception of a disturbance in my hand that evokes in me the peremptory desire that the perception should cease”.

• What sort of disturbance? As far as our experience is concerned, we are no clearer here than we are for our experience of colour and other secondary qualities. Sight doesn’t inform us what the common property of red things is. Similarly, though we recognise by bodily perception that there is something in common to all the bodily disturbances labelled pains, bodily perception doesn’t tell us what this is. All we can say of pain is that, as a whole, bodily perception of disturbances of this sort happen to evoke a greater desire that the perception should cease than do other human perceptions.

• We recognise the similarities and differences between things of one colour and those of another. Similarly, we recognise by bodily perception that the bodily disturbances associated with pain resemble or differ from the disturbances involved in other bodily sensations. Just as different red things differ in their redness, so do pains differ in their painfulness – both in kind and degree. Just as we don’t think vision tells us the nature of the differences involved in being

13 From a later reference to this operation, it seems it’s called a leucotomy.
14 Note that Armstrong says that it’s the perception, not the disturbance, that we wish to cease.
15 Check this analogy out!
different shades of the same colour, so we don’t think bodily sensations inform us of the differences in the natures of the bodily disturbances associated with pains.

- The plausibility of this account is enhanced by noting that philosophers have frequently linked pain, itches etc. with secondary qualities proper.
- If we allow that pains and other bodily sensations involve a perception of bodily disturbance, though not of its concrete nature, then the physicalist can make a contingent identification of the disturbances with purely physical disturbances in the body; in the case of pain, stimulation of pain receptors.
- When we analyse “I have a pain in my hand” as “it feels to me that a certain sort of disturbance is occurring in my hand”, the force of “feels” is just the same as in “my hand feels hot”, which neither asserts nor denies my hand being physically hot. So, there may or may not be a real physical disturbance corresponding to the felt pain. In the case of referred pain and phantom limbs, there feels to be a disturbance where there isn’t one. This is despite there being no difference between felt pain and physical pain.
- The problem of the location of physical pains is solved as for transitive sensations as the intentional location. Just as there feels to be physical pressure on a body part whether or not there actually is physical pressure, so there feels to be a disturbance located in a body part whether or not there actually is one.
- This account of location allows us to resolve the dilemma whereby the common usage is that “the pain is in my hand” while philosopher wants to say “the pain is in my mind”, and there seems to be a conflict. However, compatibility is restored when we realise that the hand is the intentional location where the disturbance feels to be, but need not actually be.
- It is possible to have very mild sensations that don’t provoke the corresponding reaction, and also possible to distinguish very mild pains from very mild itches. Armstrong analyses the situation as follows. In the case of a mild pain, we recognise the similarity between the disturbance that feels to be going on and the normal case where the reaction would be invoked. Similarly for itches and so on (but which we recognise correspond to different sorts of disturbance to pains). In no case are we aware of the intrinsic natures of the disturbances, just that that they differ. This is similar, says Armstrong, to the cases of idle wants, wishes and perceptions (mental images) – and where, in the latter two cases, introspective awareness of the mental happenings is comparable to the non-inferential awareness that a liquid contains poison, but not enough to harm.
- Giddiness is a special case, which involves a feeling of being on the verge of falling, so is a bodily feeling rather than a sensation – though there is also a bodily sensation involved. Feeling giddy involves feeling one’s body and the environment to be in idiosyncratic relative motion, which Armstrong calls the round-and-round relation. This relation may or may not hold physically, and it is because the whole body is intentionally involved that we cannot provide a bodily location for giddiness.
- Dizziness is Armstrong’s second special case, which, as it involves feeling faint, is another bodily feeling. It also tends to involve a disturbance of the visual field, but insofar as it is an intransitive bodily sensation, it involves feeling, whether truly or not, as though our head were in idiosyncratic motion relative to the environment. Because the head must be intentionally involved, describing the sensation as “dizziness in the head”, while not nonsense, is pleonastic.\(^{16}\)

\(^{16}\) Using or containing an excessive number of words, prolix, redundant, …
VII. Intensity of Sensations and Intensity of Reaction

- We can distinguish between the felt degree of a bodily sensation, which may or may not correspond to the actual degree of the disturbance, and our reaction to it. In the case of sensations of heat, saying that something is very hot usually means not just that something feels hotter than normal, but that it is causing us discomfort. Felt degree of heat and reaction to this perception are distinguishable, in that it is imaginable that something should feel equally hot on two occasions and yet not evoke distress on both.

- In the case of intransitive sensations such as tingles, we can ascribe different intensities, by which we refer not to the reaction but to the felt intensity of the disturbance in the flesh; for, except in the case of very violent tinglings, changes in intensity involve no change in reaction.

- Armstrong sees a possible distinction between the felt intensity of disturbance & the intensity of reaction for pain, itches and tickles also. If so, it is logically possible for the two intensities to vary independently and for the sufferer to recognise the fact.

- Is this differential awareness true in fact? Currently our only access to evidence is from highly dubious introspection, so we must await developments in the neuro-physiology of sensation before we can settle the issue, though Armstrong is willing to take a chance and say that introspection is correct.

- In the case of pain, the two sorts of intensity usually vary together, but it is conceivable and intuitively empirically possible that they should not. Armstrong reminds us of the leucotomy patients, of whom we could say that their perception (whether veridical or not) of the change in intensity was not accompanied by a corresponding change in reaction. Variation in intensity of reaction without variation of felt intensity are commonplace in everyday life, and Armstrong asks us to remember occasions where equally intense pains have not evoked the same reaction – one hurt us more than the other.

- Armstrong thinks the reason why we are only vaguely aware of the two levels of intensity – of feeling and reaction – in the case of pain and other bodily sensations is that it is difficult to find reliable public criteria for evaluation, and hence that methods of teaching discrimination are difficult to devise. Degree of intensity would seem to be correlated with degree of disturbance to the pain-receptors, but this is not closely correlated with the degree of tissue damage as judged by the other senses. It is an empirical fact that without public checks on their accuracy, perceptual discriminations are unlikely to become reliable. They are so unreliable in this case that we can doubt whether they do indeed involve such awareness.

- Armstrong omits discussion of different sorts of pain, which may involve irreducibly different sorts of happening “at the place of pain”. This irreducibility may not be epistemological. We can identify contingently the felt disturbances with purely physical happenings in the body, pain being the possibly non-veridical perception of such – but contingently identified not with the physical happening “at the place of pain”, but with events in the central nervous system.

VIII. Bodily Feelings

- Armstrong concludes by discussing bodily feelings – feeling tired, fresh, faint, sick, hungry and so on.
• Firstly, feeling such as the last on the list are distinguished from the rest – hunger and thirst may be excluded from the arbitrary category of bodily feelings for they are not perceptions of a current bodily state like the others and bodily sensations generally.

• Feelings of hunger and thirst are essentially desires to eat and drink, with perceptions of bodily state being relatively incidental. They are more like feeling angry than feeling faint. Feeling tired is an intermediate case. Feeling tired in the legs when running seems to involve a, maybe not dominant, desire to stop but it may also indicate a perception of their current state. Feeling fresh, faint or sick do not seem to be desires for anything at all, even though they may evoke such desires. Hence, it is plausible to treat them as bodily perceptions.

• If so, then being tired (and so on), as distinct from feeling tired, must be an objective physical state of the body, as can be seen where the body or a portion of it comes to be in a state where exertion becomes increasingly difficult to sustain. This is being tired, and similar states constitute being faint or being unwell.

• Given that bodily feelings are bodily perceptions, it must be possible to feel tired, and so on, without actually being tired, and vice versa – as we know.

• Do the perceptions that constitute bodily feelings involve inference or not; ie. are they like hearing a coach or hearing a sound? The traditional view has been that these perceptions involve inference from bodily sensations. We find by experience that certain sensations accompany or precede certain bodily states or happenings (eg. accompanying sustained use of the limbs, preceding fainting, and so on). In the 19th century, this was referred to as coenesthesis, a perception of general bodily condition based on obscure patterns of sensation. This would explain why it makes not sense to ascribe a location to bodily feelings – because it is impossible to locate a whole pattern of sensations spread throughout the body.

• Alternatively, we could take these bodily perceptions as immediate, direct though maybe non-veridical, awareness that we are in a certain bodily state. Eg. when feeling sick, we recognise ourselves as being in the bodily state that precedes being sick. In this we have to explain the lack of a perceived location for the feeling by saying simply that this is not provided by bodily perception.

• There seem to be two prima facie objections to the inferential view. (1) It is extremely difficult in particular cases to give a precise account of the bodily sensations from which the inference is allegedly drawn. (2) It doesn’t appear to us as though we’re making an inference – we just feel tired, etc.

• Armstrong thinks these objections are inconclusive. (1) would be conclusive if having a sensation always involved being aware of it, but Armstrong has already argued that we can be unaware, or only marginally aware, of sensations so there is nothing wrong with saying we make inferences from sensations of which we’re only marginally aware. (2) Armstrong has allowed for automatic or unconscious inference, so unawareness of inference is no obstacle, either.

• We might still feel uneasy about this choice of the inferential option, in that it is suspicious that we’re unable to state what obscure sensations form the basis of our inferences. However, Armstrong thinks this is our only sensible choice, because the alternative of immediate perception fares even worse. The non-inferential account makes the perceptions out to be too transparent. In practice, we can often only characterise our perceived bodily state by reference to expected future bodily states – eg. of vomiting – whereas other immediate perceptions make reference only to current happenings. In addition, bodily feelings do seem to involve current bodily sensations, however difficult they may be to analyse. For instance, one can...
infer from current sensations in the mouth and stomach that one is about to be sick. Hence, Armstrong prefers the inferential explanation of the perceptions involved in bodily feeling.

- Taking this view means there are two possible sources of error about bodily sensations. (1) Simple wrong inference from the bodily sensations normally associated with a bodily feeling (eg. of feeling sick) or (2) more radical error where the patterns of sensation are themselves non-veridical.