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Some thoughts on pain

It is common to distinguish between two aspects to the experience of pain. On the one hand there is something along the lines of a sensory aspect. On the other, there is something along the lines of an evaluative, affective, aversive, or motivational aspect. I want to focus on the experience of the second aspect from within the framework of a representational theory of consciousness. In particular I want to consider firstly, whether there is a distinctive phenomenology of this second aspect. Secondly, whether the phenomenology entails representational contents. And thirdly, the relationship between evaluative representational contents and affect, aversion, or motivation. I won't be concerned with the debate around whether the sensory aspect is representational. Instead, I'll just grant that it seems a plausible way to go. What I want to focus on is whether there are similar prospects for a representational account of the aversiveness of the experience of pain. I should also note that I will be concerned with a fairly weak version of representationalism. I take the weaker version of representationalism to be the thesis that phenomenal properties entail representational properties. I'll remain agnostic as to whether in addition to this representation entails phenomenology. I'll start by attempting to motivate a distinction between their being two aspects of the experience of pain.

Is there an aversive aspect with a distinct phenomenology?

There seems to be a fairly intuitive sense in which pain is essentially an experience and an essentially aversive one at that. When someone is in pain there is typically something hurtful, unpleasant, or aversive about their experience. The characterisation of pain as a feeling that is awful or aversive seems to be part of our common sense conception of pain. There are, of course issues around whether pain must essentially be experienced as when we become distracted. If unconscious pains are possible then it seems that pain isn't essentially experienced at all. Still, there does seem to be something intuitively plausible about the experience of pain being essentially aversive in the sense that when we experience pain it is experienced as being intrinsically awful, bad, or aversive.

Dennett argues that there is support for this aversive aspect of pain in the neuro-biology of the brain. While his model is fairly complex I want to focus on just one part of it where he distinguishes between a 'high' and 'low' road for the processing of pain stimuli. He maintains that:

'One channel carries through the lower, phylogenetically older portion of the brain... and the other passes through the thalamus and is projected onto the... neocortex. The new high path... subserves fine-grained perception: location and characterisation of pain and other stimuli. The old low path is characterised by orthodoxy as the *aversive* system, the "motivational-affective processing" system. Orthodoxy is well buttressed by evidence in this instance, and this suggested separation of the hurtfulness or awfulness of pain from its other characteristics... 201-202'.

Dennett thus distinguishes between the neuro-biological processing of sensory representational features, and the 'motivational-affective processing' of the aversive features of pain. Dennett maintains that 'pains are abhorrent, at least usually'. He also notes, however, that subjects on morphine report 'that the pain continues (and continues to be *pain*), though they no longer mind it'. Subjects with lobotomy similarly report feeling intense pain but not minding it. Dennett seems to take this as indicating interruption in low road processing while high road processing continues fairly much as usual. These cases thus seem to support the high and low road as processing different aspects of the experience of pain. On Dennett's account it seems that the aversive aspect is inessential to pain in the sense that he accepts the subjects report 'that the pain continues' even though they don't experience it as aversive. While there is usually aversiveness the folk seem to be wrong about the aversive aspect being essential. Dennett also acknowledges, however, that there typically is an aversive aspect to the experience of pain.

Tye is interested in offering a representationalist account of pain and as such he is focused on the experience of pain and representational contents rather than the neurobiological underpinnings for a distinction between two aspects to the normal experience of pain. Tye attempts to argue that the sensory aspect of pain is representational. The phenomenology entails that the person represents tissue damage

of a certain quality (such as throbbing, or stabbing) at a location. He maintains that such sensory representational contents are non-conceptual and map-like and that they represent in a three dimensional array. This account corresponds most directly to Dennett's High road of processing.

Tye also considers that there is another aspect to the typical experience of pain where the phenomenology entails an evaluative representational content. He maintains that normally we not only represent the sensory aspects of quality and location of tissue damage, but we also represent that damage as bad. The evaluative aspect of pain corresponds to Dennett's low road. Tye follows Dennett in citing the cases of morphine and lobotomy to support (and indeed to motivate) his distinction between distinct sensory representational and evaluative representational aspects of the experience of pain. Tye maintains that these cases show that one can represent tissue damage without thereby experiencing the damage as aversive. Subjects say that they continue to feel pain even though they no longer find it aversive.

Tye and Dennett seem to agree that the sensory representational high road is essential to pain rather than the aversive or evaluative representational low road. They concur that people on morphine and people who have had a lobotomy continue to experience pain even though they do not experience its aversiveness. Segear disagrees with this conclusion, however, maintaining

'Pain and pleasure have affective components which are essential to the identities of these mental states... a pain in one's ankle carries a great deal of sensory information about one's ankle but also involves the 'intrinsic irksomeness'... or aversiveness which makes it an instance of pain'. P 15

All three seem to agree that there are two distinct aspects to the normal experience of pain, however, and that these aspects can come apart when people have morphine or a lobotomy. It might be the case that there is a decision to be made about whether the sensory or affective aspect is more essential to the common sense conception of pain. While typically the affective aspect seems most salient or concerning to us the cases of morphine and lobotomy show us that people will track the sensory aspect when the

affective aspect is absent Tye maintains that one cannot have the affective aspect in the absence of the sensory aspect, but this does seem to be controversial.

Is the phenomenology of aversion representational?

Tye maintains that the experience of the aversiveness of pain is a non-conceptual representation similarly to how he characterised the sensory aspect of the experience as non-conceptually representational. While one might judge the sensory aspect is bad for one this is different from the non-conceptual evaluative representation that Tye has in mind. He maintains that 'those whose pains are normal experience the same sort of disturbance, but now it is experienced by them as bad or unpleasant'. He claims that the 'badness' of pain is an objective property of the tissue damage in the sense that

A bodily disturbance can feel bad without really being bad for one. Suppose, for example, that some diseased tissue is damaged with the result that the virus it is harbouring dies and the tissue is no longer apt to harm. [Normally tissue damage releases prostaglandins which] affect blood pressure in a negative way. The ensuing shift in the body landscape, occurring as pain is felt, is not good to the subject. It is a departure from functional equilibrium. And this the subject experiences'. In this way, pain is usually an emotional experience as well as a sensory one... (Tye In Defense of Representationalism)

It seems that there are two different ways that we could understand this passage. The first way would be to say that whether the tissue damage is bad or not is an objective property of the tissue damage. When one experiences the damage as bad and the damage is not harmful then this would be a case of misrepresentation. Another way, which might be more what Tye had in mind, would be to say that the affective aspect represents the badness of the prostaglandins being released. On this account if one experienced the affective aspect but prostaglandins weren't released then the affective aspect would be misrepresenting. I'm not sure whether prostaglandins are released in cases of phantom limb pain. If they are and the second reading is correct then the affective component of their experience wouldn't be misrepresenting.

In specifying the truth conditions for the representational contents of the experience of pain Tye maintains that

'Pains represent correctly IFF they are caused by bodily damage and cause an immediate reaction of dislike. But they can misrepresent on both counts and still remain pains. So it is not necessary for pains to occupy the standard causal role to count as pains.

I want to focus now on how there could be misrepresentation in cases where one experiences pain and yet fails to have an immediate reaction of dislike. It might be that when one experiences the sensory representational aspect of pain that state is meant to cause the affective representational aspect. Its failure to do this (as in the case of morphine) wouldn't seem to be misrepresentation so much as failure to represent the affective aspect, however. Another way we could go would be to say that the sensory representational and affective representational aspects are independent from one another in the sense that one represents sensory properties while the other represents the prostaglandins and they function independently. It might be that if the affective representational aspect occurs but fails to cause an immediate reaction of dislike that misrepresentation has occurred. I'm a little unclear on how failure to cause a response of dislike counts as a case of misrepresentation, however.

Tye characterises the masochist (pp. 134-135)

'the felt quality of the *pain* is the same for both of us. I find the felt quality horrible and I react accordingly. He has a different reaction. Our reactions involve further feelings, however. I feel anxiety and concern. He does not. Here there is a phenomenal difference'.

The sensory and evaluative aspects are thus considered to be the same in the normal case and in the case of the masochist. Tye maintains that any difference in phenomenology between the normal case and the case of the masochist is solely a difference in cognitive reactions to the same phenomenal experience of pain.

Normally evaluative representation causes anxiety and concern with their associated phenomenology whereas the masochist lacks these usual cognitive reactions. This seems to imply that the relationship between the affective experience and finding the quality horrible is a contingent connection.

Another way that we may be able to describe the masochist would be to say that while the phenomenology associated with the sensory representational aspect is normal there is a phenomenal difference in the affective experience of pain and the masochist thus fails to evaluate the tissue damage or prostaglandins as bad. As such the masochist wouldn't be expected to find the pain horrible. This would suggest that the masochist would lack the evaluative aspect of pain comparably to the person on morphine, however. I'm not sure that this is plausible.

It might be the case that the masochist has the usual affective experience and evaluative representational content but other considerations lead them to override expressing the usual aversive response. This would be one way of preserving a necessary connection between the phenomenology of pain and its intrinsic aversiveness, or the evaluative representational contents and their essential aversiveness.

What is the link between evaluative representation and aversiveness?

There seems to be a sense in which typical experiences of pain are intrinsically aversive. While I allowed before that some experiences of pain lack this aspect, such as in cases of morphine and lobotomy, it seems that normally pain is experienced as intrinsically have this aversive aspect. If the role of the evaluative representation is to cause aversion and dislike then evaluating tissue damage as bad but not being adverse to it wouldn't seem to be a case of misrepresentation, so much as malfunction, however. Tye seems to think that you can represent evaluatively without aversion and thus the connection between them is contingent. It is possible to have an experience of pain that represents badness without being intrinsically horrible, or aversive.

Tye is happy to go with a functionalist account of emotions, however. He maintains:

'Part of what makes a given state an instance of anger is its effects on what the person wants and / or believes, and relatedly on how he or she behaves. Anger, for example, normally causes the desire or urge to act violently with respect to the perceived cause. Fear normally causes the impulse to flee. Any sensory state that did not play causal roles like these would not be classified as an instance of anger or fear' Tye 127-128

As such he seems to accept a functional account of emotions where it is essential to the identity of emotions that they play the specified functional role. He also allows that the phenomenology of emotion can come apart from the functional role, however. In this instance he claims

'one might conceivably feel just what normal people feel when they are anxious and yet not be anxious oneself, if, for example, one's state has no tendency at all to cause one to behave or react anxiously (due to very odd inner wiring). But arguably the feeling then would not be the feeling *of anxiety* p 130.

As such he seems to think that what the state causes is part of the identity of the state. This might be what he is getting at with respect to pain when he said that evaluating something as bad but not having the appropriate response constituted misrepresentation. Tye seems to go one way in the case of emotions making their identity dependent on their playing a functional role while another in the case of pains allowing that they can come apart from their functional role, however. I am unclear on why he goes one way with respect to the phenomenology of pain and the other with respect to the phenomenology of emotion. It seems to me that the link between pain and aversion would be more intimate than the link between anxiety and anxious behaviour.

It seems more plausible to think that pain would have arrived on the scene prior to anxiety and other emotional responses and I am interested in the prospects for explaining the experienced valence or the pleasurable and unpleasant aspects of our experience of emotions derivatively from the experience of pleasure and pain. Tye maintains that in the case of desire:

'I need not *feel* a desire for the desire to exist. Still we do often experience a feeling of being "pulled" or "tugged" when we strongly desire something'. Tye p. 4

This phenomenology of being pulled or tugged would seem to be intrinsically rather than contingently motivational. It might be that the affective phenomenology of pain is intrinsically irksome, horrible, unpleasant, motivational, or aversive where to experience that affective phenomenology is not only to represent tissue damage or prostaglandin release as bad or unpleasant it is also just to have an experience that is intrinsically irksome, horrible, unpleasant, motivational, or aversive. Within ethics some have held the thesis that representing something as wrong entails that one has motivation to prevent it to come to be. While I haven't explored the ethical literature on the subject this may be an interesting parallel to explore. I'm not too sure whether the thesis is ultimately defensible but I have the intuition that the connection between the affective experience of pain and its horribleness or aversiveness is intrinsic. If the affective aspect to the experience of pain entails representational contents then I would think that either representing tissue damage or prostaglandin release as bad is intrinsically irksome or horrible or that there is a motivational aspect to the affective experience of pain that isn't adequately accounted for in representationalist theories of consciousness.