Identifying Pain

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When we talk about mental states, what is it that we are referring to? This issue is roughly divided between those that would identify (through some method or other) mental states with particular physical or neural states, and those who hold that such an identification cannot obtain. In this paper, I examine on view from each side of the divide: David Lewis, on how pain is contingently identical to a certain physical state, and Kripke, on why such an identification is not possible.

1 Lewis: Pain as Fulfilling a Causal Role

In "Mad Pain and Martian Pain," David Lewis presents two cases that each challenge a different sort of theory of mind. Each case looks at a being who is intuitively in pain, but could not be according to one theory or the other. In the case of the madman, we have a human being much like ourselves, except that when he is in the physical state and has the phenomenal experience that the rest of us have when we are in pain, he exhibits none of the behaviors we associate with people in pain. In fact, he has no disposition whatsoever to exhibit any of these behaviors; "his pain does not occupy the typical causal role of pain" (Lewis, 1983, p.122). Then there is the case of the Martian, whose biology is radically different from ours[1]. When the appropriate stimulus is applied, there is some change in fluid levels in his nervous system that is quite unlike anything that goes on in our bodies. Yet the Martian displays all of the typical reactive behaviors to pain when appropriately stimulated; writhing, groaning, attempting to avoid the stimulus, and so on.

Lewis holds that both the madman and the Martian are in pain, and that "a credible theory of mind needs to make a place for both" (Lewis, 1983, p.123). The example of the madman's pain is a counterexample a purely functional approach to the definition of pain, since the madman experiences pain that is divorced from its typical causal role. The example of the Martian's pain is a counterexample to a theory that identifies pain with a specific physical state. Neither of these sorts of theories by themselves suffice, and Lewis also rejects the simple disjunction of the two on the grounds of theoretical inelegance. Instead, he proposes a modified functionalist account, where pain is a non-rigid concept

[1] His mental life may also be radically different; Lewis does not seem to directly address this issue

(and likewise 'pain' is a non-rigid designator) that ends up being contingently identical to a particular of physical state.

From his account of pain, we can draw a general schema for contingently identifying a mental state with a physical state. It involves three steps:

1. Pick a mental state. Describe how that state fulfills a causal role in terms of overt behaviors. With regards to pain, it causes us to writhe and groan, to attempt to stop whatever stimulus we take to be causing the pain, and so on.

2. Select a population which exhibits these behaviors. Suitable populations are probably things like species. Note that the population should also include the specific member or members of whom the mental state was attributed in step (1).

3. Determine what physical state or states are occurring in members of that population that are causally related to the observed behaviors. For the specific example of pain, given a human population, that would be C-fiber stimulation.

Note too that you may not select the population on a the criterion that they share a given physical state that is causally related to the desired behaviors. This is to beg the question, and it would exclude Lewis' madman from being in pain, since although he shares the physical state of C-fiber stimulation as well as the phenomenological experience with other human beings, that state does not play the causal role that it does in the others.

Knowing the madman is in pain requires knowing that he is in the physical state that fulfills the causal role of pain for the (majority of) other members of his population. Furthermore, he must have been selected to be a member of that population by some criteria other than the causal role that a certain physical state fills for him. However, to know the Martian is in pain, all it seems we need to know is whether he is in some state or other that fulfills the appropriate causal role. Here the appropriate causal role is the one of writhing, groaning, avoiding the stimulus, and so on. We need not even know anything about his population, or even his biology. The only assumption we are making is that he has a mind[2].

What emerges is a conception of mental states with a strong behavioristic feel to it. That is, our definition of pain (and other mental states) is based on our observations of others, and not based on our own phenomenology. Of course, we often use our own phenomenology to make evaluations of our mental states; we know we are in pain because we feel pain; i.e, we find ourselves having that particular, peculiar experience. But since we don't have direct access to the minds, and hence the phenomenological experiences, of others, we are forced to make ascriptions of mental states to them based solely on observable behavior.

[2]We might not even need that much, if we think that even animals to whom we do not normally ascribe minds can still be in pain (as long as they exhibited the right behaviors).

There is a possible ordering question here, that may pertain to our acquisition of the terms such as 'pain' for these mental states. On the one hand we could arrive at our conclusion of which of our phenomenological experiences goes with a certain mental state by observing our own behavior in comparison to others. When we find ourselves writhing and groaning, just as others have writhed and groaned before, we ascribe to ourselves the mental state of pain, just as those in the community around us have done to those others who were also writhing and groaning. We also notice a certain unique phenomenological character that goes along with the experience. After some experience with this phenomenon, we come to use the phenomenology as a heuristic for gauging if we are in pain or not.

On the other hand, we may acquire a catalog of (at first unnamed) phenomenological experience types. We then assign names to these, based again on our observations that our behaviors during a certain type of experience match the behaviors of others in our community. We see what mental state term our peers ascribe to those others (and to us), and connect that term with that phenomenological experience type ("labeling it in the catalog," as it were)[3].

There is also the issue of what, if anything, the notion of pain simpliciter is. When we talk about pain, we may implicitly assuming a certain population, much as when we talk about something being tall, we are implicitly assuming some sort of reference class (tall for a basketball player, tall for a dwarf, tall for a building, and so on). This, in fact, is how Lewis understands the notion of pain simpliciter: "We may say that X is in pain simpliciter if and only if X is in the state that occupies the causal role of pain for the *appropriate* population" (Lewis, 1983, p.127, emphasis in original).

Then again, when we are talking about pain, all we mean is just that the subject is exhibiting a certain class of behaviors. We may take these behaviors to be causally related to some physical state, but we do not know (and may not even care) what that state is. This seems like a fairly plausible description of our everyday use of the term.

On this notion of pain, Lewis' madman is not in pain, since we do not see him exhibiting the behaviors for which we take pain to be responsible. It is only after we examine his physical state (or question him about his experience), and compare him to the rest of the population, that we may say that he is in pain. This may be the reason why the madman case seems so intuitively odd, in a way that the martian case does not. It requires more steps, and it is applying the word pain in a way that we do not normally do.

It is possible that step (3) above may fail, if there is no consistent physical state or states than can be causally related to the behaviors observed in (2). In this case, a different population should be selected. For instance, although both I and the martian may exhibit the same behaviors that match the causal role for pain, there is no physical state that we share. I am in human pain and he is in martian pain, and these are not the same.

[3]Whatever the story for how we come to acquire mental state terms is, I do not think that such a process would be conscious (even though terms like "ascribe" may seem to imply that).

2 Kripke: Pain is Just That Feeling

It is also plausible that when we use the term 'pain,' we are referring to that particular type of phenomenological experience we have when we are in pain. In fact, this is the notion that Kripke takes to the basic one; pain just is whatever "is picked out [...] by its immediate phenomenological quality" (Kripke, 1980, p.152). In the third lecture of *Naming and Necessity*, he argues against the sort of type-type identification of pain with a certain physical state (namely, C-fiber stimulation). One might think that there was such an identity, analogous to the contingent identity of heat with molecular motion, or of water with H_2O. But Kripke holds that there is something different about pain, and that it thus cannot be assimilated into the category of necessary *a posteriori* scientific identities.

A concise way to put the difference is that heat is something which causes a certain sensation in us, while pain just *is* a sensation. While it might have been possible for there to be heat without us feeling it as heat, it is not possible for there to be pain without us feeling it as pain. The mechanics of how this distinction is made bear closer scrutiny, though.

Kripke first explains the identity of hear and molecular motion, which he considers (although ultimately rejects) as a possible model for an identify of pain with C-fiber stimulation. We have a term 'heat' that designates a certain phenomenon (the details of which we neither know nor care about at this time) that gives rise in us to a particular sensation of warmth. Call this phenomenon of H, and the sensation S. In the course of our scientific investigation, we find out that it is actually the phenomenon of molecular motion that causes the sensation S. That is, H (heat) is in fact identical to molecular motion. This is a necessary identity, but it is only knowable *a posteriori*, since we needed to make some empirical observations to find it out.

Now we turn to pain. We have the term 'pain,' but it is unlike 'heat' in that it directly (and rigidly) designates a certain sensation (call it P), not a phenomenon that is the cause of some sensation. Though we find out that it is C-fibers (or B-fibers, or hydraulic cavities, or any other possible physical state) that causes this experience P in us, it is still that very experience type that is rigidly designated by the term 'pain.' Therefore, since the cause may be variant (in the actual world it is C-fiber stimulation, in some other world it is something else) while the experience remains the same (it is always *that* particular sort of feeling (of pain)), the two cannot be identical.

Another way to put it is that the case of heat and molecular motion has an element that the case of pain and C-fibers does not. In the case of heat, the heat side of the identity relation is a concept (like molecular motion) to be something distinct from our sensation. Thus the sensation (above called sensation S) can play a sort of intermediary role between the rigid designator 'heat' and its referent. In the case of pain, the sensation (P) *is* the referent of the term, so there is no way for it to serve as an intermediary.

Wherefore this distinction? It may simply be a fact about our psychology that we are inclined to postulate an external referent for 'heat' but not for 'pain.' Imagine a creature

who has the same sort of sensation S of heat as we do, except that they do not associate it in any way with a external phenomenon. That is, they experience S in the way that we experience pain. Their equivalent of the term 'heat' would then behave like our term 'pain.' This sort of creature does not seem too far-fetched. Neither does the opposite sort of creature, that would have the same sort of experience we do when we experience pain, but they experience it as being associated with an external phenomenon in the same way that we associate the sensation S with the phenomenon of heat.

3 Comparisons and Conclusions

The critical difference between Lewis' approach and Kripke's is their stance on the rigidity of the term 'pain.' For Kripke, 'pain' is a rigid designator. For Lewis it is not. This also appears to be a point of impasse for these two theories. Kripke takes the rigidity of 'pain' as a given, and (as Lewis puts it) he finds the notion that "what *is* pain might not have been [pain] [...] self-evidently false" (Lewis, 1983, p.125). As long as there is disagreement about the rigidity of pain (an 'pain'), then these two theories will for the most part be talking past each other.

So what does each theory get right? By positing that it is the phenomenological experience that is the referent of 'pain,' Kripke does capture something of the sense of immediacy (and sort of ineffability) of our notion of pain. It is just *that* feeling; we can't describe it any better than that, but we certainly know it when we feel it. Lewis' account does not offer this, since in it, the experience is not the deciding factor for any specific case where we are wondering whether a being is in pain or not.

At the same time, though, Kripke seems to be limiting himself to a certain population of beings that can be said to be in states picked out by the word 'pain.' At least he is restricted to beings whose phenomenological experiences are of a kind with ours; at most he may even be restricted to just human beings, or even a subset thereof. That may not seem to be a problem, but consider a slightly more detailed version of Lewis' Martian.

Suppose this Martian is not only physiologically different from use, but that his entire mental life is wholly of a different sort than ours. Not only does he not have C-fibers on the physical side, he does not have experiences of the same sort that we do when we experience pain[4]. Yet he displays all of the same behavioral responses as us to stimuli that in us bring about that phenomenology. I find it intuitively plausible to say that the Martian is in pain, but if we adhere to a Kripkean style theory, the Martian cannot be in pain (since he lacks the proper experience type).

One rebuttal to that claim might be to point out that what Kripke's claim is about is not about the concept of pain, but about the English word 'pain.' It makes sense that we

[4]It might have been possible to set up this case with philosophical zombies instead, but I think that provides too simple of a counter-argument. The zombie has no mental life and therefore cannot have any experience that might be categorized as pain. Thus the zombie is not in pain.

would have a word that picked out a sensation that we actually experience, and that we would not have a words that picked out sensations we do not experience, and that indeed are alien to us.

Again, I think it comes down to whether you view pain as a rigid or a non-rigid concept (and likewise for the rigidity of the term 'pain'). Initially, I think many of us have strong Kripkean intuitions about pain as being just that particular feeling. And I think this account holds up well as an account of our term 'pain' being a rigid designator. It is our word, so it should pick out our experience. As for the concept of pain, though, I think there is something more broadly appealing about Lewis' modified functional account. If nothing else, it provides us with a way of determining if other beings are in pain without needing access to their minds and their phenomenological experiences.

References

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