<u>Pain: New Essays on Its Nature and the Methodology of Its Study</u>, edited by Murat Aydede. Cambridge, MA: MIT Press, 2005. Pp. xvii + 423. H/b £56.95, P/b £20.75.

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Our preoccupation with pain can seem an eccentricity of philosophers. But just a little reflection leads one into the thickets. When I see a pencil on my desk, I'm aware of a physical thing and its objective properties; but what am I aware of when I feel a pain in my toe? A pain, perhaps? Or my toe's hurting? But what is the nature of such things? Are they physical? Are they experience-independent? To avoid unexperienced pains, we might say they are subjective, or are themselves experiences. But do those with hurting toes therefore have experiences in their feet? The issues rapidly proliferate.

Many of them are addressed in this interesting collection of original essays by philosophers, psychologists, and neuroscientists, edited by Murat Aydede. The book's core comprises two symposia. In the first, Ned Block, Barry Maund, Paul Noordhof, and Aydede himself respond to Michael Tye's representationalist account of pain. In the second, Shaun Gallagher, Morten Overgaard, Robert D'Amico, Robert Coghill, and Eddy Nahmias discuss Aydede and Donald Price's sketch of a method for pain science. Further themes are explored beyond the symposia: Colin Allen and others discuss animal pain; Fred Dretske and Christopher Hill write on the epistemology of pain; and Thomas Polger and Kenneth Sufka address metaphysical issues, proposing a way of closing reductive physicalism's "explanatory gap".

The collection is wide-ranging, but here there is only space to focus on the symposia. Before doing so, it is worth briefly registering another interesting thread running through the volume, concerning pain's aversiveness. How should we think about pain's unpleasantness and its motivational character? How do these features relate, on the one hand, to pain's sensory dimension; and, on the other, to desire and emotion? Aydede starts with David Armstrong's explanation of pains' "affective phenomenology" (Aydede's phrase) in terms of their evoking the desire that they cease (25). (Austen Clark relatedly speaks of pains straddling "the divide between sensation and desire" (187).) Aydede objects that Armstrong has got things the wrong way around: the desire is surely explained by pain's unpleasantness, not vice versa (28). For his part, Tye's latest account is that pains' aversiveness consists in their representing bodily damage as *bad*, in the sense of being *apt to cause harm* (107). (Moreland Perkins similarly mentions "evaluative perception" (209).) But this fails to cohere with Tye's own conception of the non-conceptual perceptual content he thinks pains enjoy—or so argue Aydede (131), Barry Maund (147), and Paul Noordhof (159-

61). As for pain and emotion, Don Gustafson uses neuroscientific results to suggest that we should think of physical pain as "emotionlike" (238), and not a sensation, whereas Jaak Panksepp claims the neural systems underlying emotional pain are exaptations from systems that in our ancestral past were responsible only for physical pain (374).

This theme is fascinating and the contributions under its head are intriguing and suggestive, as are certain recent proposals in the literature, especially that pains have imperative content. Now and again, though, the discussion illustrates the need for greater precision about the phenomena and questions arising under the rubric of pain's aversiveness.

But I must now turn to the first symposium, in which Tye defends his well-known representationalist view that pain experiences are perceptual experiences whose phenomenal character is constituted by their representational content, content concerning tissue damage in the subject's own body (99-102). Although sympathetic to aspects of Tye's overall representationalist programme (125, 130, 151), Aydede and Noordhof present objections. Aydede thinks Tye neglects asymmetries between the visual and pain cases. Whereas visual experiences prompt us to apply concepts of what those experiences represent, he claims, pain experiences prompt applications of pain, a concept of experience itself (12, 18). Those in pain, he goes on, are "conceptually 'focussed'" on the experience itself, not its object (23). The experience is their "immediate interest" (23). Indeed, introspection is essentially involved, Aydede thinks, even in our merely undergoing pain experiences, quite unlike the visual case (24).

Now, some of this seems off-base. The case for saying that being in pain involves introspection remains unclear, as does Aydede's notion of "immediate interest" (certainly those in pain have *some* kind of interest in whether their bodies are damaged). A case can also be made that pain experiences, like visual experiences, do indeed prompt applications of concepts of what they represent, since arguably we make judgements about bodily damage on their basis.

But another of Aydede's points is stronger. He thinks that if one introspects an experience—at least an experience whose phenomenal character is its content—then one must have the concepts required to articulate the experience's content (29, 128). Aydede's requirement, as we might call it, is arguably met by an episode of introspection in which I am aware that it seems to me that I am seeing a red cube, say. But, when it comes to introspective awareness that one is in pain, Tye's view seems to flout Aydede's requirement,

since Tye thinks the introspected experience represents damage while conceding that the introspecting subject need not possess the concept of damage (30, 115).

I think we can distil two responses of Tye's. The first is to deny Aydede's contrast between pain and vision (100-101, 164-67). In a new twist on his view (164), Tye claims that "pain_E" (first-order pain experience) represents "pain_O" ("pain as an object or quality experienced in having pain_E"). So if one's introspective awareness that one is *in pain* is in fact awareness that one feels $pain_O$, then that awareness does after all exercise the concept needed to articulate the first-order experience's content—namely, $pain_O$. Thus Aydede's requirement is met.

But this strategy must satisfactorily explain what pain₀ is. Tye says that it is tissue damage but "only insofar as it is represented by pain_E" (166). One way of reading this is that $pain_0$ or (to substitute my term) $hurting_0$ is the following property of body parts: being represented in a pain experience as damaged. That poses this question: do pain experiences represent body parts as hurting₀ or as damaged? Suppose Tye says they represent parts only as hurting₀, not as damaged. Then parts never really hurt₀, since the account says that being represented as damaged is required for that. But if instead he says that pain experiences also represent parts as damaged, then he fails to meet Aydede's requirement, given his concession that we don't need the concept damage to introspect pain (115).

At times, Tye seems to have in mind a different account of pain₀: that pains₀ are instances of damage represented in pain experiences (165-66). But a version of our earlier difficulty still threatens if we ask whether we're aware of pains₀ as pains₀ or instead as instances of damage. Tye seems to think that we're aware of them not as anything, but only simpliciter (165-66). But amongst the worries this raises, surely, is that it renders problematic the locative phenomenology of pain experience. For the locative phenomenology should be accommodated, arguably, by construing pain experiences as representing not just instances of damage but *body parts*—in particular, body parts as being certain ways. Hence the question "Which ways?" arises. And it is hard to see how the notion of pain₀ (or hurting₀) can provide an answer to that question without re-introducing the proposal rejected above.

Still, Tye can side-step all these difficulties if he simply denies Aydede's requirement, which at times he seems tempted to. At times, that is, he seems to think that even introspection of experience whose character consists in its content doesn't require possession of the concepts needed to articulate that content (114-16). All that introspection

requires, his idea goes, is a reliable connection between first-order experience and second-order awareness (114).

Rather than pursue that reply, let us turn to Noordhof's objections to Tye. He continues his debate with Tye from the pages of *Analysis* (2001-02). The debate focuses on this argument:

Α

- 1. The pain is in my fingertip
- 2. My fingertip is in my mouth
- 3. Therefore, the pain is in my mouth

Tye says that representationalism can explain the argument's invalidity by invoking both the intensionality of (1) and (3) and an equivocation in (1) and (2) between two "purely spatial" senses of "in" (105, 173). He takes this to be amongst representationalism's virtues, for he prefers this diagnosis to any that invokes senses of "in" which are not purely spatial (173). Noordhof's diagnosis is one such. He thinks premise (1) uses "in" in a state-attributing sense (152-9), hence that A fails for the same reason as the following (I've modified his example):

В

- 4. The twitch is in my fingertip
- 5. My fingertip is in my mouth
- 6. Therefore, the twitch is in my mouth

Now this diagnosis of Noordhof's strikes me as plausible, and as corroborated by the possibility of paraphrasing both A and B by eliminating definite descriptions for verbs, e.g. construing "The pain is in my fingertip" as "My fingertip hurts", and "The twitch is in my fingertip" as "My fingertip twitches". So, I agree: Noordhof shows that Tye cannot use (A) to motivate his representationalist account.

But notice that Noordhof does not claim that his diagnosis undermines Tye's representationalist view. And I doubt it does, provided the latter is construed not as Tye often seems to construe it, namely as a semantic thesis concerning the meaning or logical form of sentences such as (1), but rather as a metaphysical thesis to the effect that what makes (1) true is my undergoing an experience representing that my fingertip is damaged. Again, Noordhof's diagnosis strikes me as neutral regarding which metaphysical view of a

pain's being in my finger (or, equivalently, my finger's hurting) is correct. Noordhof's own view is that pains are states of body parts. (He neglects the question what constitutes a part's being in such a state.) My point is that not only this view, but Tye's and others will—when construed metaphysically—be compatible with a diagnosis of A's invalidity in terms of the formal parallel between A and B.

Before finishing, I turn to the second symposium, in which Aydede and Donald Price aim to sooth anxieties arising from pain scientists' reliance on subject's introspective reports, e.g. such worries as that introspective privilege is incompatible with scientific objectivity, that introspection affects its objects, and that introspective reports can be contaminated by subjects' presuppositions.

Aydede and Price begin by arguing that metaphysical monism is perfectly compatible with an "epistemological dualism" on which both introspection and neuroscience are routes to knowledge of the mental (249). Their proposed method for pain science therefore involves both a "horizontal phase", when subjects (initially the investigators themselves) report on their pain experiences; and a "vertical phase", when correlations are sought between neural events and these experiential reports. With the anxieties in mind, they emphasise that, during the horizontal phase, subjects must avoid presuppositions about their experiences' causes (262) and must attend to their experiences only in a passive way, which "is not interpretative or judgemental" but rather occurs "in a present-oriented context, that is, either in the present or a 'reliving' of past situations" (261).

D'Amico is the most opposed to Aydede and Price's proposal. In an interesting discussion of their method's vertical phase, he questions the idea of the concepts of folk psychology and neuroscience "meshing or co-referring" or being "harnessed together [in] correlations" (295), so different are the schemes to which they belong. He thinks this difference in schemes is illustrated by introspective reports' immunity to neuroscientific correction (292-3). But Aydede and Price reply by denying such immunity (319-322).

The remaining commentators are more supportive and largely quibble with details. Gallagher and Overgaard, for example, find Aydede and Price's exclusive focus on introspection off-key, since experience-based reports which scientists might use include not only introspective reports but, for instance, perceptual judgements (279-80). Investigators' serving as experimental subjects also raises a worry about bias (Gallagher and Overgaard: 282; Coghill: 301-3). But Aydede and Price reply that, actually, it might *reduce* certain kinds of bias, making investigators less reliant on the literature when deciding what experiences

an experiment is likely to elicit and what questions about those experiences subjects might fruitfully be asked (318).

It strikes me, if I might add some quibbles of my own, that Aydede and Price's notion of passive attending remains opaque. And I note that in illustrating their method, Aydede and Price sometimes inadvertently illustrate its pitfalls, saying for example that an investigator might (in the "phenomenological reduction" process) more concisely render the report "I feel bothered by this and slightly annoyed" as "I have a feeling of intrusion related to this pain" (262), when in fact the latter is surely not equivalent (nor more concise). To the extent that Aydede and Price hope their method will illuminate philosophical problems (266), moreover, it is worth bearing in mind how generally unhelpful introspection can be regarding philosophical issues. To take just one example, introspection is at best inconclusive when considering whether visual experiences enjoy anything richer than low-level content.

Aydede's collection is interesting. Its highly interdisciplinary character has both benefits and costs. On the one hand, it is helpful to be brought up-to-date on (painfully achieved) scientific results, and to explore the complex interaction between philosophy and science. On the other hand, when trying to speak each other's language, philosophers and scientists sometimes end up talking past one another. And so, at times, it is here, not least because of varied uses of some crucial terminology ("qualia", "first-person", "subjective", and so forth). But, when it works, the interdisciplinary conversation is illuminating. And, certainly, Aydede's wide-ranging volume will contain something of interest for all of us who work on pain, that most intractable of sensations.

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