

Imperative Transparency

MANOLO MARTÍNEZ 

Universitat de Barcelona

manolomartinez@ub.edu

I respond to an objection recently formulated by Barlassina and Hayward against first-order imperativism about pain, according to which it cannot account for the self-directed motivational force of pain. I am going to agree with them: it cannot. This is because pain does not have self-directed motivational force. I will argue that the alternative view—that pain is about dealing with extramental, bodily threats, not about dealing with itself—makes better sense of introspection, and of empirical research on pain avoidance. Also, a naturalistic theory of body-involving commands falls straightforwardly out of our most prominent naturalistic metasemantic accounts, while the token-reflexive contents that would underlie self-directed motivation are more problematic.

1 Introduction

Intentionalism (Dretske 1997; Thau 2001; Tye 2000; Crane 2003—among many others) is the view that the phenomenal character of mental states depends on their intentional content. In the vast majority of intentionalist accounts, the intentional content in question is descriptive, or *indicative*—roughly, content that can be cashed out in terms of correctness conditions. I will use ‘representation’ to refer to indicative intentional states, and ‘representationalism’ to refer to this traditional, indicativist brand of intentionalism.

Imperativism (Klein 2007, 2015; Hall 2008; Martínez 2011), on the other hand, is the view that affective phenomenology depends on the imperative content of certain intentional states—roughly, content that can be cashed out in terms of satisfaction conditions. I will be concerning myself only with imperativist approaches to pain-related phenomenology, and in particular to its affective dimension: the characteristically unpleasant phenomenology associated with pains—their *painfulness* (Clark 2005; Cutter and Tye 2011; Jacobson 2013).¹

¹ According to many theorists, pain has a purely sensory phenomenological component that is, at least sometimes, fully dissociated from its painfulness (Grahek 2007). I will not discuss this sensory phenomenology here. The account by Barlassina and Hayward, which will be my main target in this paper, also deals exclusively with the painfulness of pain, not its sensory dimension.

Imperativism has been offered as a solution to several recalcitrant problems for intentionalism about pain, such as the apparent non-existence of hallucinatory pain (see Block 2006 for the problem, and Martínez 2011 for an imperativist treatment). It also provides a straightforward explanation of the predominantly motivational role that pain plays in our mental lives (O'Sullivan and Schroer 2012; Martínez 2015). Finally, imperative content is not an innovation of their theories, but an essential ingredient of our best naturalistic theories of content, such as teleosemantic accounts (Millikan 1984; Shea 2018), or informational approaches in the signalling-games framework (Skyrms 2010; Martínez and Klein 2016). The same theories that aim at uncovering sufficient conditions for some entity to count as an indicative intentional state—a representation—also uncover, in the process, sufficient conditions for an entity to count as an imperative intentional state.

Luca Barlassina and Max Hayward, in their excellent *Mind* paper (Barlassina and Hayward 2019), have distinguished two kinds of imperativist position. First, what they call *first-order imperativism* (Martínez 2011, 2015) is the view that the imperative contents that underlie the painfulness of pain concern the body of the subject in pain. According to first-order imperativism, the painfulness of pain depends on a command to fix or prevent threats to bodily integrity. An idealized version of the relevant imperative contents could, perhaps, correspond to the content schema 'See to it that bodily damage d does not exist' (Martínez 2015, p. 2261). Second, what they call *higher-order imperativism*, most prominently associated with Colin Klein, according to which painfulness is a mental state, M_1 , that targets *another* mental state, M_0 , such that M_1 has the content 'Don't have [M_0]!' (Klein 2015, p. 186, variable changed). Barlassina and Hayward offer as well their own reflexive, or 'same-order' version of imperativism, according to which the painfulness² of pain also depends on imperative contents that target mental states. For same-order imperativism, though, the target mental state is the same state that has the imperative content:

An experience U feels unpleasant in virtue of being (at least partly) constituted by a Command with reflexive imperative content: . . .
Less of U! (Barlassina and Hayward 2019, p. 1014)

² While I am restricting myself to pain, Barlassina and Hayward intend their account to be applicable to affective phenomenology in general.

In this paper I respond to the main objection levelled by Barlassina and Hayward against first-order imperativism: that it cannot accommodate the ‘intrinsic and reflexive motivational force’ of pain (2019), p. 1017 and §4.2).³ According to them, pain has *intrinsic* motivational force, in that it is part of what it is to be a pain that it motivates us to behave in certain ways. In particular, its motivational force is *reflexive*, in that ‘when we experience pain, our first motivation is to get rid of the pain’ (2019, p. 1024). This reflexive (self-directed) motivational force, they suggest, warrants attributing a token-reflexive imperative content to pain, as shown in the schema quoted above.

First-order imperativists agree with their same-order cousins that painfulness is intrinsically motivational—hence the appeal to imperative content. On the other hand, first-order imperativism is fundamentally at odds with the idea that what is motivated is *self*-directed behaviour. In a sense, this is just what the theory amounts to: the view that pain is about dealing with extramental, bodily threats, not about dealing with itself. I will argue here that the resulting view on the motivational structure of pain, and on what introspection actually shows, is sensible and attractive—indeed, preferable to same-order imperativism.

More specifically, in §2, I argue that Barlassina and Hayward’s taking the unpleasant phenomenal character of pain as evidence for a token-reflexive content betrays an illusion of reflexivity entirely analogous to the one identified by Moore (1903). I argue that, once we recognize that the kind of transparency that pertains to imperatives is importantly different from the kind of transparency that pertains to representations, pains can be shown to be as transparent as perceptual states. In §3, I show how the body-directed imperative contents of first-order imperativism, and their attendant body-directed motivational roles, are compatible with, and typically result in, the tokening of other mental states with pain-directed motivational roles; I review empirical evidence to the effect that pain avoidance is the result of general-purpose, anxiety-based coping mechanisms that operate in analogous ways in perception.

Finally, in §4, I build on some of the above points to formulate an objection to same-order imperativism. One of the main motivations

³ I regard this as the most interesting, and potentially most damaging objection to first-order imperativism developed in their paper, but is not the only one. Their other objections, related to possible imperativist treatments of pleasure, or of what they call the ‘pure affect’ component of depression (Barlassina and Hayward 2019, §5.3.2) are not discussed here, and need to be treated separately.

for intentionalism in general and imperativism in particular is to make progress on the naturalization of phenomenology, but it is unclear that same-order imperativism will live up to this expectation, as it is unclear how a naturalistic metasemantics for the relevant kinds of reflexive contents is supposed to work. A self-extinguishing painful state will be adaptive only if, and to the extent that, it has bodily-threat-averting consequences—but this will fix a body-involving imperative content. In §5, I offer some concluding remarks.

2 Imperative transparency

According to first-order imperativism, painful phenomenology is intrinsically body-directed. Pains also typically result in pain-avoiding behaviour, but this motivational role is implemented by mental states other than the pains themselves. According to same-order imperativism, on the other hand, painful phenomenology is intrinsically pain-directed. Pains also motivate body-directed behaviour, but as a mere means to the end of extinguishing themselves. Barlassina and Hayward's main reason for postulating a self-directed motivational role for pains appears to be an argument from introspection: '[W]hen we experience pain, our first motivation is to get rid of the pain. And we are motivated to do that . . . simply because pain feels unpleasant' (2019, p. 1024). The suggestion seems to be that the reflexive motivational role of pains (and, from it, their token-reflexive intentional profile) can be read off their phenomenal character: because it is pains that are unpleasant, it must be a quality of pains that their painfulness somehow refers back to.

This way of modelling painful phenomenology is an example of what G. E. Moore, in 'The Refutation of Idealism', called the 'universally received opinion' that '[a]ny sensation or idea is a "*thing*", and . . . its object is the quality of this thing' (Moore 1903, p. 448, emphasis in original). According to same-order imperativism, a pain is a thing, and its object is a quality of this thing—its intrinsic badness, its to-be-avoidedness. Taking the phenomenal unpleasantness of pain to depend on the to-be-avoidedness of the very same pain is in all relevant respects like taking the phenomenal character of a sensation as of blue to depend on the mental-blueness of the very same sensation. This is not necessarily incoherent (*pace* Moore 1903, p. 445), but it is also not an intentionalist position in any substantive sense. Intentionalism is, in fact, a *reaction* to Moore's universally received opinion: it is

precisely the hypothesis that the phenomenal character of an experience does not depend on features intrinsic to the experience, but on its intentional ties to entities other than itself.⁴

As the history of these ideas is usually told, intentionalism became a viable option as a result of a Gestalt switch of sorts: first it seemed obvious (the ‘universally received opinion’) that introspection presented us with properties of our own mental states; then it seemed less obvious: ‘When we try to introspect the sensation of blue, all we can see is the blue’ (Moore 1903, p. 450). The general thesis that introspection presents us, not with (properties of) our experiences, but with what our experiences are *about* is what we now call the ‘transparency of experience’, and has been widely adduced as support for the idea that phenomenal character depends on intentional content, perhaps most explicitly since Harman (1990):

Look at a tree and try to turn your attention to intrinsic features of your visual experience. I predict you will find that the only features there to turn your attention to will be features of the presented tree. (Harman 1990, p. 39)

Perhaps Barlassina and Hayward’s retreat to the pre-Moorean received opinion is fuelled by a perceived impossibility to perform the Gestalt switch I mentioned above; indeed, they would not be alone in claiming that pain is not transparent (Jacobson 2013; Aydede and Fulkerson 2014; see also Kozuch 2018). In fact, though, pain *is* as transparent as perceptions; we simply need to factor in the fact that the relevant contents are commands and not representations. Just as (indicative) sensory experiences are mostly transparent,⁵ in that they

⁴ ‘Entities other than itself’ possibly include other mental states. The problem is not with experience-directed intentionality, but with relying on putative intentional ties of a mental state to itself: this may respect the intentionalist letter, but it certainly does not respect its spirit.

An anonymous reviewer has suggested that (given that for Barlassina and Hayward, a pain *P* is a composite of a sensory state *S* and a command *C*), while *C* officially says something like ‘Less of *P*!’, we could read it as in fact saying ‘Less of *S*!’ This would, indeed, afford a better grip on the intentional features of *C*, and therefore on the affective component of *P*: painfulness would depend on a command to avoid a certain sensory state. On the other hand, this move would make Barlassina and Hayward’s account very close to, and perhaps indistinguishable from, higher-order imperativism as developed by Klein (2015).

⁵ Why the ‘mostly’ hedge? In different versions of intentionalism, the dependence between content and phenomenal character is variously developed in terms of supervenience (Tye 2000), grounding (Kriegel 2017), or identity (Tye 1995). Intentionalist theories can rest on weaker dependence relations, though. I find the following idea attractive: when it comes to studying phenomenal consciousness, the best analytical lens on brain function, the one with

depend on world-involving representations, the painfulness of pain is mostly transparent, in that it depends on world-involving (concretely, body-involving) commands. Pains tell us to fix or prevent bodily damage: (intense) pain feels like being compelled (urgently; Klein and Martínez (2018)) to fix something that is wrong with some part of our body. They direct our attention to damage, existing or not, and force us to take action to fix or prevent it—regardless of whether this is possible. Paraphrasing Harman, if you try to turn your attention to intrinsic features of your pain, you will find that the only features there to turn your attention to are features of your body, in the context of an avoidance imperative.

Discussions and characterizations of transparency in the literature often take for granted that the putatively transparent states are representations. This begs the question against imperativism. A recent example of this is the otherwise sophisticated discussion in Aydede (2019), where it is argued that pains are not strongly transparent. This is because pains have ‘introspectable features over and above those implicated in their *representational* content’ (2019, p. 685, my emphasis; Aydede takes his characterization of strong transparency verbatim from Tye, 2006, p. 296). Of course, if first-order imperativism is true, pain has no representational (that is, indicative intentional) content, and strong transparency is not even on the table. This is not a technicality: imperative contents are not in the business of representing features, but of getting their addressee to bring certain features into existence—to make their satisfaction conditions actual. It is no wonder that imperatives do not represent (that is, present as existing; see below) those as-yet-non-existent features.

There is no reason why transparency should be the exclusive property of representations. Any experience is transparent to the extent that its content, indicative or imperative, exhausts the features presented in the experience. Aydede’s notion of strong transparency and other similar ones can be easily patched along these lines so that they apply to imperatives: we can say that *an experience is imperatively*

the right fineness of grain, is given by intentional properties. Intentionalists, according to this weaker reading, are betting on these properties—among the many other properties brain processes have—being the ones that most directly relate to phenomenal consciousness.

Under this ‘best analytical lens’ understanding, we should not expect intentional content to fully exhaust phenomenology, and should not, therefore, expect full transparency. The first-order imperativist can agree that ‘phenomenal character outruns [intentional] content’ (Block 1996, p. 20; see also Kind 2003) if non-intentional phenomena make a comparatively small explanatory contribution. Hence the hedge.

strongly transparent if it does not have introspectable features over and above those implicated in its imperative content. If the painfulness of pain does not have introspectable features over and above a certain bodily damage *d*, presented in the context of an avoidance imperative, then it is imperatively transparent.

One worry about imperative transparency is precisely the reference to imperativeness. After all, in Harman's original passage, all there is to the phenomenology of looking at a tree are features *of the tree*. Aren't we cheating by appealing to what look like attitudinal features? We are not: representationalism relies on attitudinal features just as much. Take Aydede again: 'Whatever else the transparency of genuine perceptual experiences involves it must take us to the extramental world in a *committal* way' (Aydede 2006a, p. 127, emphasis in the original). The idea that perceptual experiences bring with them a commitment to their content is widespread: 'They represent the world as actually being the represented way, as actually fulfilling their condition of correctness or truth' (Glüer 2018, p. 2987; see also references therein). In a nutshell: the fact that the phenomenology of looking at a tree is transparent does not mean that it is exhausted by a tree-related content, abstractly considered. This phenomenology also has to involve a committal taking. The tree we look at is not merely presupposed, postulated, entertained, or given as a forceless content by experience. Experience *declares* the tree to be there. In the debate on representationalism, there is some tendency to talk as if sets of possible worlds or other candidates for pure contents were enough to account for mental representation. They are not. Some attitude or other is needed. An attitudinal, committal-related component is central to the phenomenal character of indicative experiences. Similarly, an attitudinal, imperative component is central to the phenomenal character of painful experiences. In neither case is this component incompatible with transparency.⁶

3 Killing the messenger

Even if the first-order imperativist is right and pains are primarily body-directed, it is still true that, when in pain, we often behave in

⁶ As an aside, does this make the imperativist an impure intentionalist (Chalmers 2004)? Not necessarily: if you think of imperative content as 'constitutively endowed with mood' (Martínez 2011, p. 79), you get to be a pure intentionalist. If instead you prefer a Fregean content/force model, that's OK too—your imperativism is then a version of impure intentionalism. In any case, representationalism is in the same boat: the committal phenomenology typical of sensory representation is also either a declarative 'force' or an inextricable component of an indicative content constitutively endowed with mood.

ways that are not body-directed, but pain-directed: we take painkillers, refrain from moving, or lower the blinds, not in order to deal with any bodily insult, but in order to silence the pain. Accounts based on body-directed intentional content have an apparent problem explaining what motivates this behaviour. Why should we silence a command to deal with bodily damage? If the damage is there, the command is pertinent; if the damage is *not* there, while we should disregard it, it would seem to be harmless. This is sometimes called the *killing the messenger* objection (Bain 2011; Jacobson 2013; Boswell 2016) after Plutarch's story of how Tigranes cut off the head of the first messenger who came to tell him that his enemy Lucullus was approaching.

Martínez (2015) sketches a pain-as-spam model that aims at explaining the rationality of killing-the-messenger behaviour in a way compatible with first-order imperativism: pain often makes insistent, unreasonable or unfulfillable requests that take a non-negligible toll on our cognitive resources. Pain, for example, competes for resources with attentional task performance (Veldhuijzen et al. 2006), and chronic pain often leads to insomnia and depression (Wilson et al. 2002). Neurophysiologically, too, pain is a vicious messenger: frequent exposure is associated with debilitating consequences such as neuroendocrine dysregulation and alterations in long-term pain sensitivity (Chapman and Gavrin 1999), which can lead to hyperalgesia when it happens in early life (Schwaller and Fitzgerald 2019). It is very reasonable to silence these importunate commands, just as it would make perfect sense to silence a messenger who insists in yammering about Lucullus when we know full well (because we already listened the first few times they said it) that he is approaching and we have already taken action, or cannot, or will not take it.

In the pain-as-spam model it is reasonable to silence a pain if it is spammy (insistent, unreasonable, unfulfillable). This opens a line of argument against the model: it seems to generate the prediction that 'any action [the subject] takes to get rid of the pain (for example, taking a painkiller, or trying to distract herself) would only arise after she has realized that there is nothing further she can do to [deal with the relevant bodily threat]' (Barlassina and Hayward 2019, p. 1024). This would be implausible: sometimes pain-avoidant behaviour kicks in very quickly, and in the absence of any prior effort to deal with the relevant bodily threat. Barlassina and Hayward appear to suggest that the automaticity of pain-avoidant behaviour is evidence that pain

primarily motivates self-directed behaviour. In fact, though, avoidant behaviour of an entirely analogous sort is a well-established phenomenon that happens across the board in perception, kicks in very quickly, and is not the result of personal level decisions. Psychologists call this phenomenon *experiential avoidance*. It occurs ‘when a person is unwilling to remain in contact with particular private experiences . . . and takes steps to alter the form or frequency of these experiences or the contexts that occasion them’ (Hayes et al. 2004, p. 554). As far as I have been able to find, no psychologist seriously entertains the idea that it is the very visual perceptions that mandate their own extinction. Given that automatic, subpersonally initiated avoidant behaviour is not taken as evidence of self-directedness in the context of experiential avoidance, its status as evidence in the context of pain-related killing-the-messenger behaviour should equally be regarded with caution.

A mechanism that is often invoked in explanations of experiential avoidance is the so-called *vigilance-avoidance* pattern: a general psychological tendency to ‘early vigilance and late avoidance of threat processing’ that is more present the more prone to anxiety the avoidant subject is (Calvo and Eysenck 2000; Mogg et al. 2004; Wieser et al. 2009). For example, alcoholics presented with consumption cues will typically pay more attention than control subjects to these cues initially (the vigilance phase), but subsequently shut them off (the avoidance phase), and avoid contact with them (Stormark et al. 1997). In other studies, it has been shown that spider-phobic subjects spend less time viewing spider pictures than controls; and blood-injection-injury-phobic subjects less time viewing pictures of injuries than controls (Tolin et al. 1999). Similar results hold for subjects prone to social anxiety (Wieser et al. 2009). These avoidance phenomena are probably not the result of any personal-level piece of reasoning: subjects who fall under the repressor profile (the most prone to experiential avoidance) are precisely the most unaware of how anxious they are (Derakshan, Eysenck and Myers 2007, p. 1594). In experiential avoidance we have no problem distinguishing between what is presented as threatening (fully extramental entities such as alcohol, spiders or blood) and the coping strategy that consists in shutting down the mental state that represents the threat. Claiming that *the perception of spiders* is reflexively motivating for repressors would amount to claiming that a mental state that would seem, ostensibly, to be a representation of the presence of spiders is in fact a command to see to it

that it itself disappears. A more apt description of the situation is one according to which it is *extramental threats* that are presented as threatening, and suppression of perceptual engagement is the subsequent result of a coping mechanism such as the vigilance-avoidance pattern.

Analogous (and, plausibly, analogously extrinsic) coping mechanisms are described for pain-avoidant behaviour. In their seminal presentation of the *fear-avoidance* model of pain,⁷ Lethem et al. (1983, p. 404) distinguish two main kinds of response to pain: an ‘adaptive response of confrontation’, in which pain is seen as a ‘temporary nuisance’ to be overcome as the underlying bodily problem ‘resolves naturally in response to conservative management or surgery’, and that of a ‘non-adaptive pain avoider’, who is mainly motivated by the avoidance of pain, and suffers a number of important physical and psychological negative consequences as a result of this (p. 405, fig. 2). Just as with experiential avoidance, the pain-avoider profile is more frequent in more anxious patients (Asmundson and Taylor 1996; McCracken et al. 1993). Just as experiential avoiders get ‘stuck in a cycle of regulation and control when emotional or psychological pain show up from time to time’ (Kashdan et al. 2006, p. 1316), pain avoiders get stuck in an ‘avoidance spiral’ (Lethem et al. 1983, p. 405; see also Philips 1987). It should also be noted that the standard measure of pain avoidance, the Pain Anxiety Symptom Scale (McCracken, Zayfert and Gross 1992), describes precisely the kind of behaviour that philosophers interested in the killing-the-messenger problem focus on: ‘as soon as pain comes on I take medication to reduce it’ or ‘I go immediately to bed when I feel severe pain’.

Apart from providing some evidence for the extrinsicity of pain-avoidance mechanisms, the foregoing description of the pain-avoider profile casts some doubt on Barlassina and Hayward’s claim that ‘when we experience pain, our first motivation is to get rid of the pain’. Actually, it turns out that not everyone has this tendency and, to the extent that we do, we shouldn’t.

⁷ The same-order imperativist will perhaps ask: fear of what, if there is nothing intrinsically dislikeable about pain? According to the first-order imperativist, the process kicks off with a ‘fear’ of the bodily condition that is presented as to be fixed or avoided (more precisely, an imperative involving that condition). As we are about to see, unfortunately, in pain avoiders, a perfectly reasonable mindfulness of one’s body spirals into an irrational and non-adaptive fear of the pain itself. I thank an anonymous reviewer for pressing me on this point.

4 Naturalistic metasemantics for reflexive contents

I have argued that accounting for the painfulness of pain and for pain avoidance does not require the postulation of token-reflexive contents. Moreover, such contents present important difficulties for a naturalistic treatment of pain. It is not that token-reflexive contents in and of themselves are suspicious or problematic, of course: this very sentence is an example of an entity with reflexive content. The problem is with trying to implement reflexive contents using the means offered by pain circuitry, without the benefit of a recursive syntax or general-purpose demonstratives. Barlassina and Hayward take a stab at doing this, along broadly teleosemantic lines:

Command K has imperative content C if and only if K has the biological function of making it the case that C. (Barlassina and Hayward 2019, p. 1039)

This is a streamlined version of what Millikan calls *imperative intentional icons* (Millikan 1984, pp. 99f.), and builds on the very plausible idea that a mental command such as, for example, ‘Eat!’—perhaps related to our experiences of hunger (Hall 2008)—has the content it has in virtue of the fact that its biological function is to get its addressee to eat. According to Barlassina and Hayward, extending this idea to token-reflexive contents simply requires making the relevant substitutions:

Command K– has the content *Less of the experience of which K– is a constitutive part!* if and only if K– has the biological function of producing less of the experience of which it is a constitutive part. (Barlassina and Hayward 2019, p. 1039)

One problem with this mere substitution, though, is that, in contrast to ‘Eat!’, it is hard to see which set of circumstances (say, which evolutionary history) would result in a state acquiring the biological function to self-extinguish. Such a function is reminiscent of the ‘Ultimate Machine’ that Marvin Minsky invented, and Claude Shannon built, while Minsky was visiting Bell Labs as a graduate student: a machine whose only function, when switched on, is to switch itself off. According to Minsky, this was a playful attempt at creating ‘the most useless machine ever made so far’ (Minsky 2011). Barlassina and Hayward offer the following explanation of how ‘biological ultimate-machines’ may have been evolutionarily advantageous:

What is the evolutionary advantage of reflexive Commands? Since we maintain that affective phenomenal character depends on these

Commands, an answer to that question will also be an answer to the following question: what is the evolutionary advantage of affective phenomenal character? (Barlassina and Hayward 2019, p. 1039)

The idea here is that, because Barlassina and Hayward are making affective phenomenal character depend on reflexive content, it is open to them to take explanations of the evolutionary advantage of affective phenomenal character to be, by the same token, explanations of the advantage of reflexive content. This is problematic: they are trying to establish that self-extinguishing behaviour can be evolutionarily advantageous, in order to argue that certain mental states could therefore have self-extinguishing content, in the context of arguing that this content undergirds affective phenomenal character. Using the last link in arguing for the first link risks being circular. One way to see the problem is to note that reflexive contents are, in fact, not making any explanatory contribution: for any candidate imperative content C, the argument would proceed unchanged. Paraphrasing Barlassina and Hayward, since the imperativists favouring C as the content of pain maintain that affective phenomenal character depends on C, an answer to the question about the evolutionary advantage of C-Commands will also be an answer to the question about the evolutionary advantage of affective phenomenal character. No mention has been made of what C actually stands for in arguing for its evolutionary advantage.

One way to mitigate the excessive liberality of this manoeuvre is to make the target imperativist account face at least another explanandum: how did the system acquire the relevant reflexive biological functions? In evolutionary time, the only way for mental-state extinguishing to promote fitness is by 'promoting or allowing tissue healing during the early recuperative period' (Philips 1987); that is, by promoting body-related states of affairs. As we saw above, beyond that, pain avoidance is maladaptive. That is to say, pain-directed behaviour is evolutionarily advantageous *only to the extent that it has first-order, body-related consequences*. The relevant biological functions are in fact first-order and body-related.

An anonymous reviewer has suggested to me the following possible rejoinder on behalf of Barlassina and Hayward: perhaps a token-reflexive 'Less of me!' kind of content is the most unified and specific content one can zero in on, if the desired result of the imperative is the avoidance of bodily harm but no clear, concrete course of action suggests itself. But if the desired result is the avoidance of bodily

harm, a first-order-imperativist content such as ‘Avoid that bodily harm!’ captures this aim more directly and explicitly, and is not more disjunctive than the token-reflexive option. Also, the body-directed content and not the token-reflexive content is ‘the last member of the series of things [the imperative] is supposed to map onto and to produce’, which is the way to fix imperative contents according to Millikan (1984, p. 100).

Having said that, I have no reason to doubt that metasemantic theories, alternative to the teleosemantic mainstream, can be formulated in which pain signals come out token-reflexive. Comparing those possible theories, once formulated, to teleosemantics would be the best way to assess the objection I have raised in this section.

5 Conclusions

I have given three main reasons to prefer first-order to same-order imperativism. First, same-order imperativism is at least partially the result of a pre-Moorean illusion of reflexivity; while first-order imperativism is faithful to the central intentionalist insight that the phenomenal character of experiences depends on intentional ties with entities other than themselves. Second, the first-order imperativist account of pain avoidance developed in §3 makes better sense of empirical results about experience avoidance in general. Third, a naturalistic theory of body-involving commands falls straightforwardly out of our best metasemantic accounts, while token-reflexive contents appear at least to require more work.

None of this is a knock-down argument against same-order imperativism. The intentionalist insight can be abandoned; the empirical evidence from experiential avoidance could be misleading; our metasemantic accounts can be refined, or new ones formulated. In my view, the main reason to prefer first- to same-order imperativism is that the former is a development of the very plausible idea that pains are primarily tools for the management and prevention of bodily damage, while the latter makes pain all about pain management: somehow evolution has created and maintained entities whose primary purpose is to self-destruct. It has also placed them at the centre of our mental life, forcing us to dedicate very substantive cognitive resources to fulfilling this death wish.

The pain system is a crucial piece of brain and sensory circuitry that allows us to go about our business in relatively good shape for a few dozen years. The hedonistic tradition in which Barlassina and

Hayward are inscribed has it that this circuitry is not just a means to an end but an end in itself; perhaps, as Bentham put it, one of our sovereign masters. This is not incompatible with naturalism, but it is uncongenial to it. In any event, a picture of pain along these hedonistic lines is not mandated by our phenomenology.⁸

References

- Asmundson, Gordon J. G., and Steven Taylor 1996: 'Role of Anxiety Sensitivity in Pain-Related Fear and Avoidance'. *Journal of Behavioral Medicine*, 19(6), pp. 577–86.
- Aydede, Murat 2006a: 'The Main Difficulty With Pain'. In Aydede 2006b, pp. 123–36.
- Aydede, Murat 2006b (ed.): *Pain: New Essays on Its Nature and the Methodology of Its Study*. Cambridge, MA: MIT Press.
- 2019: 'Is the Experience of Pain Transparent?' *Synthese*, 196(2), pp. 677–708.
- Aydede, Murat and Matthew Fulkeron 2014: 'Affect: Representationalists' Headache'. *Philosophical Studies*, 170(2), pp. 175–98.
- Bain, David 2011: 'The Imperative View of Pain'. *Journal of Consciousness Studies*, 18(9–10), pp. 164–85.
- Barlassina, Luca, and Max Khan Hayward 2019: 'More of Me! Less of Me! Reflexive Imperativism about Affective Phenomenal Character'. *Mind*, 128, pp. 1013–44.
- Block, Ned 1996: 'Mental Paint and Mental Latex'. *Philosophical Issues*, 7, pp. 19–49.
- 2006: 'Bodily Sensations as an Obstacle for Representationism'. In Aydede 2006b, pp. 137–42.
- Boswell, Paul 2016: 'Making Sense of Unpleasantness: Evaluationism and Shooting the Messenger'. *Philosophical Studies*, 173(11), pp. 2969–92.
- Calvo, Manuel G., and Michael W. Eysenck 2000: 'Early Vigilance and Late Avoidance of Threat Processing: Repressive Coping versus Low/High Anxiety'. *Cognition and Emotion*, 14(6), pp. 763–87.

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- Chalmers, David J. 2004: 'The Representational Character of Experience'. In Brian Leiter (ed.), *The Future for Philosophy*, pp. 153–81. Oxford: Oxford University Press.
- Chapman, C. Richard, and Jonathan Gavrin 1999: 'Suffering: The Contributions of Persistent Pain'. *The Lancet*, 353(9171), pp. 2233–7. doi: 10.1016/S0140-6736(99)01308-2.
- Clark, Austen 2005: 'Painfulness Is Not a Quale'. In Aydede 2006b, pp. 177–98.
- Crane, Tim 2003: 'The Intentional Structure of Consciousness'. In Quentin Smith and Aleksandar Jokic (eds.), *Consciousness: New Philosophical Perspectives*, pp. 33–56. Oxford: Oxford University Press.
- Cutter, Brian, and Michael Tye 2011: 'Tracking Representationalism and the Painfulness of Pain'. *Philosophical Issues*, 21: *The Epistemology of Perception*.
- Derakshan, Nazanin, Michael W. Eysenck, and Lynn B. Myers 2007: 'Emotional Information Processing in Repressors: The Vigilance–Avoidance Theory'. *Cognition and Emotion*, 21(8), pp. 1585–1614.
- Dretske, Fred 1997: *Naturalizing the Mind*. Cambridge, MA: MIT Press.
- Glüer, Kathrin 2018: 'Defeating Looks'. *Synthese*, 195(7), pp. 2985–3012.
- Grahek, N. 2007: *Feeling Pain and Being in Pain*. Cambridge, MA: MIT Press.
- Hall, Richard J. 2008: 'If It Itches, Scratch!' *Australasian Journal of Philosophy*, 86(4), pp. 525–35.
- Harman, Gilbert 1990: 'The Intrinsic Quality of Experience'. *Philosophical Perspectives*, 4: *Action Theory and Philosophy of Mind*, pp. 31–52.
- Hayes, Steven C., et al. 2004: 'Measuring Experiential Avoidance: A Preliminary Test of a Working Model'. *Psychological Record*, 54(4), pp. 553–78.
- Jacobson, Hilla 2013: 'Killing the Messenger: Representationalism and the Painfulness of Pain'. *Philosophical Quarterly*, 63(252), pp. 509–19.
- Kashdan, Todd B., et al. 2006: 'Experiential Avoidance as a Generalized Psychological Vulnerability: Comparisons with Coping and Emotion Regulation Strategies'. *Behaviour Research and Therapy*, 44(9), pp. 1301–20.

- Kind, Amy 2003: 'What's So Transparent about Transparency?' *Philosophical Studies*, 115(3), pp. 225–44.
- Klein, Colin 2007: 'An Imperative Theory of Pain'. *Journal of Philosophy*, 104, pp. 517–32.
- 2015: *What the Body Commands: The Imperative Theory of Pain*. Cambridge, MA: MIT Press.
- Klein, Colin and Manolo Martínez 2018: 'Imperativism and Pain Intensity'. In David Bain, Michael Brady, and Jennifer Corns (eds.), *Philosophy of Pain: Unpleasantness, Emotion, and Deviance*, pp. 13–26. London: Routledge.
- Kozuch, Benjamin 2018: 'No Pain, No Gain (in Darwinian Fitness): A Representational Account of Affective Experience'. *Erkenntnis*, 85(3), pp. 693–714.
- Kriegel, Uriah 2017: 'Reductive Representationalism and Emotional Phenomenology'. *Midwest Studies In Philosophy*, 41(1), pp. 41–59.
- Lethem, J., et al. 1983: 'Outline of a Fear-Avoidance Model of Exaggerated Pain Perception—I'. *Behaviour Research and Therapy*, 21(4), pp. 401–8.
- McCracken, Lance M., Claudia Zayfert, and Richard T. Gross 1992: 'The Pain Anxiety Symptoms Scale: Development and Validation of a Scale to Measure Fear of Pain'. *Pain*, 50(1), pp. 67–73.
- McCracken, Lance M., et al. 1993: 'Prediction of Pain in Patients with Chronic Low Back Pain: Effects of Inaccurate Prediction and Pain-Related Anxiety'. *Behaviour Research and Therapy*, 31(7), pp. 647–52.
- Martínez, Manolo 2011: 'Imperative Content and the Painfulness of Pain'. *Phenomenology and the Cognitive Sciences*, 10(1), pp. 67–90.
- 2015: 'Pains as Reasons'. *Philosophical Studies*, 172(9), pp. 2261–74.
- Martínez, Manolo and Colin Klein 2016: 'Pain Signals Are Predominantly Imperative'. *Biology and Philosophy*, 31(2), pp. 283–98.
- Millikan, Ruth Garrett 1984: *Language, Thought and Other Biological Categories*. Cambridge, MA: MIT Press.
- Minsky, Marvin 2011: 'Making the Most Useless Machine'. *Web of Stories*, 13 May 2011. <https://www.webofstories.com/play/marvin.minsky/127>.
- Mogg, Karin, et al. 2004: 'Time Course of Attentional Bias for Threat Scenes: Testing the Vigilance-Avoidance Hypothesis'. *Cognition and Emotion*, 18(5), pp. 689–700.
- Moore, G. E. 1903: 'The Refutation of Idealism'. *Mind*, 12, pp. 433–53.

- O'Sullivan, Brendan, and Robert Schroer 2012: 'Painful Reasons: Representationalism as a Theory of Pain'. *Philosophical Quarterly*, 62(249), pp. 737–58.
- Philips, H. C. 1987: 'Avoidance Behaviour and Its Role in Sustaining Chronic Pain'. *Behaviour Research and Therapy, Special Issue: Chronic Pain*, 25(4), pp. 273–9.
- Schwaller, Fred, and Maria Fitzgerald 2019: 'The Consequences of Pain in Early Life: Injury-Induced Plasticity in Developing Pain Pathways'. *European Journal of Neuroscience*, pp. 344–52.
- Shea, Nicholas 2018: *Representation in Cognitive Science*. Oxford: Oxford University Press.
- Skyrms, Brian 2010: *Signals: Evolution, Learning and Information*. New York: Oxford University Press.
- Stormark, Kjell Morten, et al. 1997: 'Selective Processing of Visual Alcohol Cues in Abstinent Alcoholics: An Approach-Avoidance Conflict?' *Addictive Behaviors*, 22(4), pp. 509–19.
- Thau, Michael 2001: *Consciousness and Cognition*. New York: Oxford University Press.
- Tolin, David F., et al. 1999: 'Visual Avoidance in Specific Phobia'. *Behaviour Research and Therapy*, 37(1), pp. 63–70.
- Tye, Michael 1995: *Ten Problems of Consciousness: A Representational Theory of the Phenomenal Mind*. Cambridge, MA: MIT Press.
- Tye, Michael 2000: *Consciousness, Color and Content*. Cambridge, MA: MIT Press.
- Veldhuijzen, Dieuwke S., et al. 2006: 'Pain and Attention: Attentional Disruption or Distraction?' *Journal of Pain*, 7(1), pp. 11–20.
- Wieser, Matthias J., et al. 2009: 'Fear of Negative Evaluation and the Hypervigilance-Avoidance Hypothesis: An Eye-Tracking Study'. *Journal of Neural Transmission*, 116(6), pp. 717–23.
- Wilson, Keith G., et al. 2002: 'Major Depression and Insomnia in Chronic Pain'. *Clinical Journal of Pain*, 18(2), pp. 77–83.

