

# Pain as Reasons

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## 1 Introduction

Intentionalism (e.g., Carruthers 2000; Tye 2000; Dretske 2003) is the view that the phenomenal character of experience depends on its intentional content. *Imperativism* (Hall 2008; Klein 2007; Martínez 2011; the label is first used in Bain 2011) is a refinement of this view as applied to the affective (i.e., pleasant or unpleasant) qualitative component of certain experiences: it claims that the phenomenal character of the affective component of pains, orgasms, and pleasant or unpleasant sensory experience depends on their *imperative* intentional content.

In particular, in this paper I will be assuming that pains have imperative contents that are substitutions of the following schema (cf. Martínez 2011):

**Pain Content:** See to it that bodily damage  $d$  does not exist.

Indicative intentional content—imperative content’s better known counterpart, also called representational content—is individuated by a set of correctness conditions, that specify the way the world is. Imperative contents, on the other hand, can be thought of as specifying a way the world should be—we can think of them as individuated by satisfaction conditions (to a first approximation, but see subsection 4.1 below).

In this paper I canvass an imperativist treatment of pains as reasons, in various senses to be distinguished in section 2. Section 3 sketches a general treatment of imperatives as reason-giving; after that, I elaborate on this sketch for the four main claims identified in section 2: pain is a normative/motivating reason for body-directed/pain-directed behavior. Sections 4 and 5 discuss pains as reasons (motivating reasons in the former section; justifying in the latter) for body-directed behavior. Section 6 discusses pains as reasons for pain-directed behavior. Section 7 draws some consequences of the foregoing discussion for broadly hedonistic claims regarding the intrinsic badness of pains. Finally, section 8 summarizes the main conclusions.

## 2 Kinds of Reasons, and Kinds of Behavior

Two main kinds of reasons for engaging in a certain piece of behavior are standardly distinguished in the philosophy of action: *justifying* and *motivating*. Justifying reasons are *good* reasons; ones that a rational agent, aware of the facts, would count as adequate, albeit defeasible, grounds for action. Motivating reasons, on the other hand, are the ones that should actually figure in the explanation of a certain piece of behavior—the ones that the agent was, as a matter of fact, acting on. Typically, motivating reasons are mental states; justifying reasons are worldly states of affairs.

For example, my belief that it's freezing outside provides a *motivating* reason for my wearing hat, gloves and scarf over a heavy coat—that is, it contributes to an explanation of this behavior of mine—regardless of whether it is, indeed, freezing outside. The fact that it actually is unseasonably warm, on the other hand, provides a *justifying* reason for me to wear just a light jacket; although one that I fail to act upon, ignorant as I am of the good news.

When we talk about pain in particular as a reason-conferring mental state, it is useful to draw an additional distinction between two kinds of behavior that pain can help motivate, or justify: *body-directed*, and *pain-directed*. Examples of the former are tending an injured area, or avoiding noxious stimuli—in general, behavior that helps avoid bodily damage, or helps fix it if it has already happened. Examples of the latter are taking painkillers, or asking for epidural anaesthesia.

These two distinctions leave us with four claims regarding the reason-conferring roles of pain:

- C1:** Pain is a motivating reason for body-directed behavior.
- C2:** Pain is a justifying reason for body-directed behavior.
- C3:** Pain is a motivating reason for pain-directed behavior.
- C4:** Pain is a justifying reason for pain-directed behavior.

All four claims are plausible. C1: pain is clearly a motivating reason for a range of body-directed actions. There is ample evidence, for example, that it helps explain that the subject in pain avoid the noxious stimulus that caused it, or take special care of the injured area (Gao et al. 2004; Koyama, Kato & Mikami 2000; Koyama et al. 2001). C3: It also clearly motivates pain-directed behavior: having a headache makes one reach for an analgesic; the main reason for parturients to change their mind from not wanting to wanting epidural analgesia is pain (Daly, Harris & Pan 2009). And it is hard to deny that such pain-directed behavior will often be a reasonable course of action in the presence of pain, as C4 claims.

C2 needs to be handled with some care: in the characterization of the justifying/motivating distinction above, I have suggested that justifying reasons are

typically wordly states of affairs. It would be entirely congenial with this characterization to reject C2: what rationalizes the body-directed behavior associated with pain, the idea would be, is not pain itself but the bodily damage that figures in the (if imperativists are right, imperative) content of pain.

On the other hand, a version of pluralism about justifying reasons, according to which any number of connected states of affairs can provide justification, doesn't seem to be obviously misguided. Take again the example with which I introduced the motivating/justifying distinction at the beginning of this section. The fact that it is unseasonably warm provides justification for certain weather-directed behavior; but one could perhaps claim that, e.g., my having been told by a reliable witness that it is unseasonably warm would have also provided good, albeit defeasible grounds for my wearing a light jacket. *Both* weather itself and reliable weather reports could, under this construal, function as normative reasons for weather-directed behavior.

Under the pluralist construal of justifying reasons C2 is arguably true. Under the alternative monist construal, according to which only wordly states of affairs (perhaps only one each time) can function as justifying reasons, C2 is false. This is not the place to adjudicate between these alternative approaches to justifying reasons, and if C2 happens to be true the imperativist needs to do one extra bit of work – explaining how it can be. Thus, in what follows I will simply assume C2.

I will now canvass an imperativist treatment of these four claims. As a starting point, in the following section, I briefly argue that imperatives can, and customarily do, act both as motivating and justifying reasons.

### 3 Imperatives as Reasons

An account that makes pains depend on imperatives is in a good position to accommodate both their motivational and justifying roles. First, it is clear that imperatives can be motivational. Consider the following examples (all from Hamblin 1987, p. 5f.):

- (1) Stop that dreadful noise, children, at once!
- (2) Pull over, driver.
- (3) Wait here a moment, would you?

Contexts in which these imperatives will motivate their addressees to stop the noise, pull over, or wait there, are easy to describe. Hamblin (1987, p. 10) calls this kind of imperatives, which depend on coercive authority of some sort, *wilful*.

And, second, there are also *non-wilful* imperatives—advices, suggestions, recipes, instructions—which derive their force “not from [their] support by some legal or coercive authority, but on [their] being *good* . . . or *reasonable*” (ibid.). Non-wilful

imperatives can provide normative reasons for action (the following examples are also from Hamblin 1987, p. 11):

- (4) Get all the x-terms on the left-hand side.
- (5) I think your most promising plan is to invest in nickel exploration.

Again, it is easy to think of situations in which utterances of (4) and (5) provide the addressee with good reasons for getting all the x-terms on the left-hand side, or investing in nickel exploration.<sup>1</sup>

Finally, imperatives can and often do combine the above features. The resulting entities are motivating commands *and* justifying advice at the same time. For example, it is reasonable for Celia to obey her dad’s command;

- (6) Switch off the light and go to sleep.

If she does not, among other things, she’ll be sleepy tomorrow morning at school. As the good advice it is, acting on it is rational and justified. But that’s not at all why Celia switches off the light. For her, (6) functions as a mere wilful imperative: it is her dad’s authority over all matters bedtime that makes it motivating for her.

We might call imperatives such as (6), which are both coercive and, typically, good advice, *benevolent-dictator imperatives*. The most straightforward way for imperativism to accommodate the four reason-conferring roles of pain distinguished above, I submit, is to treat pains as benevolent-dictator imperatives.

The following sections develop this suggestion. First, I clarify in which sense pains have coercive authority over the subject in pain. After that, I elaborate on the idea that the imperatives that fix the phenomenal character of pain are typically good advice.

## 4 C1: Motivation of Body-Directed Behavior

One cannot simply *assume* that pains are benevolent-dictator imperatives, and call it a day. It is, for example, natural to worry that the imperativist might be here taking uncritically for granted too close a correspondence between public, natural-language imperatives and the kind of mental commands pains are suppose to be identical with. Perhaps, moreover, the similarities between public

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<sup>1</sup>By the by: some might find it odd that Hamblin counts (5) as an imperative—an advice, in this case. Isn’t it clearly indicative? One of the main themes in Hamblin’s groundbreaking book is, in effect, that syntax is a fallible guide to mood; the idea being, roughly, that (5) and “Invest in nickel exploration!” differ only in irrelevant respects, as far as their imperativalness is concerned. Subection 4.1 below sketches a semantics for imperatives according to which (5), in its intended reading, is decidedly imperative.

imperatives and mental ones break down in precisely the respects that ground the former's, but would not ground the latter's, status as (wilful, coercive) commands. This worry can be substantiated by showing that two natural explanations of what it is that makes (6) motivating for Celia can hardly be used for pains:

First, perhaps Celia's dad is using his I'm-not-kidding tone, and this makes the command, which she might otherwise take nonchalantly, compelling. This is the wrong kind of model for a pain imperative: even if we can establish a parallel between I'm-not-kidding tones and certain features of painful phenomenology, one of the main goals of the imperativist program is, precisely, to *explicate* these phenomenological features of pains by appeal to their nature as imperatives, not the other way round (cf. Bain 2013, p. S78).

Or, second, perhaps what is motivating Celia is her *tacit belief* that her dad has the relevant authority in matters bedtime. It's indeed possible that we sometimes hold tacit beliefs about the authority of our pains – *Listen to your pain*, physiotherapists and yoga instructors tell us –, but pains are motivating also for creatures (animals, or very young humans) for which the postulation of such beliefs, however tacit, is unwarranted.

In any event, this kind of quasi-metaphorical accounts of motivation, with their heavy reliance on analogies with public-language imperatives, can only play a preliminary role in the explication of the reason-conferring role of pain. They make certain theoretical possibilities salient, and this is undoubtedly useful, but at some point they will have to be recast in a more explicit fashion. I now sketch a semantics of imperatives, and a model of behavior production based on this semantics, that should help make the proposal more explicit. The upshot will be a plausible imperativist model of pains as motivators that does not rely on I'm-not-kidding tones or tacit beliefs.

## 4.1 A Semantics for Imperatives<sup>2</sup>

In the introduction I suggested that a first approximation to the content of imperatives is to think of it as a set of satisfaction conditions—ways the world should be. In fact, we often need to model imperatives as inducing a more fine-grained partition over the set of possible worlds: all satisfaction worlds are, by the imperative's own lights, preferable to non-satisfaction worlds, but some satisfaction worlds are better than others. Consider:

(7) Fix my computer, and the sooner the better!

All worlds in which the addressee fixes the utterer's computer are satisfaction worlds; but it is equally part of the content of (7) that worlds in which the

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<sup>2</sup>This and the next subsections elaborate on fn. 10 in (Klein & Martínez forthcoming). It is, as such, much indebted to Colin Klein. For simplicity, I am here restricting the discussion to what, in that chapter, we call *selfish imperatives*.

addressee fixes it expediently are preferable to worlds in which she fixes it at a more leisurely pace. More generally, imperatives are to be individuated by a *ranking*,  $\succsim$ , over all possible worlds.<sup>3</sup>

In the simplest case, the set of satisfaction worlds is the higher of two partitions ranked in  $\succsim$ . In more complicated cases,  $\succsim$  will be more fine grained—and the satisfaction worlds will be the union of some of the higher-ranked partitions. The *Pain Content* imperative presented in the introduction, then, can be seen as individuated by a ranking that promotes worlds in which bodily damage  $d$  doesn't exist higher up than worlds in which it does. Identifying pains (and other conative states) with imperatives, and then identifying imperatives with rankings, makes possible the following attractive way of modelling the integration of conative states in the production of behavior:

## 4.2 A Model of the Production of Behavior

Consider an agent, Iris, who has to integrate a number of conative mental states pulling in different directions into a single, coherent action plan. Iris is, perhaps, sleepy, has a terrible toothache, intends to pull an all-nighter studying, would like to call her mom more. What should she do next? What follows is a possible model of the way in which problems of this kind are solved:

We first identify, for each conative state (each concurrent goal, desire, pain, pleasure, etc. of Iris's), the ranking it induces, as per the semantics sketched in the previous subsection. Such rankings will typically be mutually inconsistent: for example, the ranking corresponding to Iris's sleepiness places worlds in which she closes her books and heads for the bed higher up than worlds in which she keeps on studying; the ranking corresponding to her intention of pulling an all-nighter has these preferences reversed.

Next, this plurality of conative states must be aggregated into a coherent action plan. We can also model this plan as a ranking (the *action-producing ranking*,  $R_{action}$ ), that results from the aggregation of the different conative-state rankings. A natural way to fill in the details of this aggregation is to aim at *Kemeny optimality* (Kemeny 1959; Ailon, Charikar & Newman 2008):

We identify the distance between two rankings  $R_a$  and  $R_b$  with the number of pairwise disagreements among them. For example, suppose we are dealing with three possible worlds, and  $R_a$  ranks them as  $w_1 > w_2 > w_3$ , while  $R_b$  ranks them as  $w_1 > w_3 > w_2$ . With three possible worlds, there are three possible pairwise comparisons:  $w_1$  with  $w_2$ ;  $w_1$  with  $w_3$ ; and  $w_2$  with  $w_3$ . Our two rankings agree in the first two comparisons, and disagree in the third, so the distance between them is 1. For another example, the distance between  $R_a$  and the ranking  $w_3 > w_2 > w_1$  is 3.

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<sup>3</sup>More strictly, by the ordered pair consisting of a set of satisfaction worlds, and a ranking (see Klein & Martínez forthcoming). The simplified model to be sketched here is sufficient for my current purposes.

This distance is called the *Kendall tau distance*,  $K\tau$ , and in general is calculated as follows ( $i$  and  $j$  range over sets of possible worlds):

$$\delta_{R_a, R_b}(i, j) = \begin{cases} 1 & \text{iff } i >_{R_a} j \text{ and } i <_{R_b} j, \text{ or } i >_{R_b} j \text{ and } i <_{R_a} j \\ 0 & \text{otherwise} \end{cases}$$

$$K\tau(R_a, R_b) = \sum_{i, j \in R_a, R_b} \delta_{R_a, R_b}(i, j)$$

We then define  $Rw$  as the set of tuples  $\{\langle R_1, w_1 \rangle, \dots, \langle R_n, w_n \rangle\}$ , where the  $R_i$  are the rankings individuated by each of Iris's conative states, and  $w_i$  the *weights* with which they will aggregate—reals between 0 and 1. The *weighted average distance* between a certain ranking  $S$  and the rankings in  $Rw$  is to be identified with the weighted average of Kendall tau distances between  $S$  and each of the  $R_i$ :

$$D(S, Rw) = \sum_{\langle R_i, w_i \rangle \in Rw} w_i \cdot K\tau(R_i, S)$$

Finally, the action-producing ranking will be the *Kemeny-optimal aggregate*; the ranking that minimizes this weighted average distance:

$$\forall S [D(S, Rw) \geq D(R_{action}, Rw)]$$

$R_{action}$  will then be acted upon, by trying to see to it that the actual world is as highly placed in it as possible. According to the model, then, the action to be produced in response to  $Rw$  is the one that maximizes the position of the actual world in  $R_{action}$ .

This aggregation need not be an automatic, wholly sub-personal process. The deliberating agent might be able to influence it by assigning different weights to different rankings: Perhaps (6), when uttered by Celia's dad in a more casual tone, compels her to assign a weight of, say, 0.01 to the ranking corresponding to this imperative. But when, later in the evening, the imperative is uttered in the I'm-not-kidding tone, Celia might be ready to change its weight to 0.2—and this will work wonders with the top positions of the Kemeny-optimal, action-producing ranking, and Celia's subsequent action.

On the other hand, nothing in the model (or, indeed, in the facts being modelled) makes it the case that *every* imperative should be subject to personal-level appraisal in the way just described. In fact, the most realistic description of Celia's case is probably not one in which she *decides* to change (6)'s weight as a result of his dad no longer being kidding, but one in which she, to a large extent, *finds* herself doing so, without much personal control. For some imperatives, there is considerable latitude as to which weight the subject should assign to

it in their deliberations. For others, the choice of weights might be much more restricted. Iris’s intention to pull an all-nighter is mostly under her control. Her toothache and sleepiness, not so much.

I suggest that pains are among these less latitudinal rankings, and only let their addressee choose between a narrow range of weights – *I’m a 0.25-to-0.27 kind of guy; now aggregate me.*

This provides a coherent way in which pains can motivate to different degrees, without relying on any of the routes that we found objectionable at the beginning of this section: They do not motivate because they are strident, or their tone otherwise peremptory; and they do not depend on tacit beliefs of any sort.<sup>4</sup> Pains take a more direct route to motivation: we are simply wired in a way such that there is not much room for conscious, personal-level tinkering with the weights of pains in the action-producing ranking aggregate.

## 5 C2: Justification of Body-Directed Behavior

Even if this imperativist model can explain how pains motivate body-directed behavior, nothing in it entails that they should also provide *good* reasons for such behavior. This is not terribly surprising: the fact that something is a piece of advice does not entail that it is good advice.

On the other hand, most intentionalists defend a brand of naturalistic psychosemantics a consequence of which is that pains *will* typically provide good advice regarding body-directed behavior and, thus, that trusting them will be justified. According to *teleosemantic* accounts of mental content (two foundational discussions are Millikan 1984; Papineau 1998; it is endorsed, as an ingredient of a broadly intentionalist framework, by Cutter & Tye 2011; Dretske 2003; Martínez 2011, among others) a mental state  $M$  has an imperative content such as

See to it that  $p$ !

in virtue of the fact that the consumers of  $M$  (roughly, those mental mechanisms that are normally causally downstream from  $M$ ) have the biological function of bringing it about that  $p$ .<sup>5</sup> In its turn, the most prominent naturalistic theory of biological function (the so-called *etioloical approach*, see Godfrey-Smith (1994), Price (1998), Millikan (2002), among many others) has it that a certain type of device  $D$  has the biological function of  $\Phi$ ing in virtue of the fact that tokens of  $D$ ’s having  $\Phi$ ed in the past explains that there are  $D$ s today—that is, in virtue of the fact that  $\Phi$ ing has been evolutionarily useful.

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<sup>4</sup>On the other hand, tacit recognition of someone’s (or something’s) authority can be accommodated by the present model, as differences in the default weight assigned to imperatives from different sources.

<sup>5</sup>And  $p$  is the most distal effect they have the function of producing. In the main text I gloss over this and other necessary complications of the teleosemantic theory of imperatives.



Putting these two ideas together, the imperatives that fix the affective phenomenology of our pains has the content it has because seeing to it that bodily damages disappear has been evolutionarily useful. This makes pain imperatives reliable guides to bodily health, and explains that it is typically reasonable to obey them.<sup>6</sup>

## 6 C3 and C4: Pain-Directed Behavior

The foregoing discussion of pains as motivators and justifiers has focused on body-directed behavior – tending the bodily part in pain, protecting it from further aggression, and the like. It is clear that pains also help motivate and justify *pain* avoidance. I turn now to outlining an imperativist account of this further reason-conferring role.

It is often assumed that the pain-directed reason-conferring role is intrinsic to pains; that pains constitutively compel us to get away from *themselves*. This, for example, is presumably entailed by the popular idea that pain is intrinsically bad (e.g., Feldman 2002; Goldstein 1989, see also section 7 below). If you find imperativism attractive, this intrinsicity thesis will probably strike you as untoward. After all, the *Pain Content* schema in section 1 only targets bodily damage, and this suggests that only body-directed behavior will be intrinsically motivated by a mental state whose phenomenal character depends on such an imperative content. In what follows, I sketch an account of pain avoidance according to which, indeed, pain only extrinsically (but also typically) motivates and justifies it. Before that, though, I will provide some reasons to think that, quite independently from its uncongeniality to imperativism, the tendency to accord pains intrinsic pain-avoidant motivational and justifying roles should be anyway resisted, as it rests on an equivocation—indeed, the kind of equivocation intentionalism is in no small measure a reaction to:

One typical pretheoretical stance towards the character of visual experience is to think of, e.g., color qualia as intrinsic features thereof. Those of us with intentionalist proclivities, though, eventually come to regard the characterization of qualia as intrinsic as something of a use-mention equivocation: it's not that visual experiences are painted in mental blue, it is rather that they *stand for* real-world blue. Indeed, the thesis that when we attend to the character of experiences all there is for us to attend to are the properties of the objects represented therein, the *transparency thesis* (Harman 1990; Tye 1995), was one of the main motivations in the early development of intentionalism by Michael Tye and others.

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<sup>6</sup>I should remind the reader that this short section assumes without argument that claim C2 in section 2 is true. If it is not, the foregoing considerations can be read as explaining why, typically, when one is in pain there will be a justifying reason for body-directed behavior – even if that pain is not itself that reason. I would like to thank an anonymous reviewer for helping me articulate my views about C2.

I suggest that the idea that pains are compelling us to see to it that *they* cease is structurally similar to the use-mention equivocation with regards to perceptual experience just mentioned; and that what we might call an *imperative transparency thesis* is a more apt description of how things stand with respect to affective phenomenology: when we attend to what the painfulness of our pains directs us to do, we only find extramental, bodily targets. Headaches direct us to do something about our head; toothaches direct us to do something about our tooth; premenstrual cramps direct us to do something about our abdomen. No pain, however fleeting, abstract or undefined, is directing us to do something about itself. It is also difficult to imagine what the evolutionary relevance of a mental state whose ultimate goal was to cease to exist would be.

What then *is* the mechanism by which pain motivates pain avoidance? Here I will explore one option that has been, as far as I can tell, overlooked in the discussion about pains as reasons: C3 and C4 depend on a general psychological strategy in the management of spam, of which alarm fatigue is an example. In any event, the discussion to follow should not be taken to imply that this mechanism is the main one, let alone the only one, at work in the motivation of pain-directed behavior. That is to a large extent an empirical matter.

Take one of the pains we typically want to get rid of: Iris's toothache, for example. Let's assume that this pain has been going on for hours now, asking Iris to see to it that a certain deep cavity in one of her molars disappears. It is now late at night, and Iris has already made an appointment with a dentist early the next morning. There is nothing more she can do now to follow the toothache command. In such a situation, it would be very reasonable for Iris to silence the pain command. In terms of the model presented above, the toothache has taken Iris's action-producing ranking hostage, and has its top positions filled with worlds in which the cavity is dealt with *now*, to the detriment of other attainable, reasonable goals such as studying or sleeping – now, it is just *spam*. If Iris is able to limit the impact that such unhelpful advice is having on her short-term goals, she should do so. And she can, by taking a painkiller. There is no major difficulty in reaching the conclusion that certain pains should be avoided, without pain-avoidance being somehow constitutive of the pains themselves.

In fact, there appears to be a general psychological tendency to respond to insistent requests which we cannot or will not honor by *avoiding* the request in question. Again, it is not difficult to describe cases, in no way related to pain, in which what appears to be a psychological mechanism along these lines is at work:

- It is well established that health warnings messages in tobacco packages causes not just quitting smoking, but also avoidant behavior: covering up the warning, using a cigarette case or avoiding particular labels (Borland et al. 2009, p. 359). This avoidant behavior is more robust when the warnings are graphical and explicit (Hammond 2011), but is also present when they are just text-based (Hammond et al. 2004).

- A side effect of the introduction of information-technology tools in health care is what Harrison, Koppel & Bar-Lev (2007), p. 547 call “alarm fatigue”:

Decision support systems . . . could trigger an overdose of reminders, alerts, or warning messages . . . [T]he user could feel supervised, treated as “stupid,” distrusted, or resentful of being constantly interrupted. As a result, health care professionals disregard the messages, click them away, or turn the warning systems off when they have an opportunity. (Ash, Berg & Coeira 2004, p. 109)

I suggest that being motivated to avoid pains is just another example of a general tendency to display avoidant reactions to insistent, unfulfillable, misguided, or otherwise inconvenient requests. The subject in pain, like the physician swamped in automated alert messages, or the smoker being constantly reminded to do what she has no intention of doing, simply takes steps to turn the pain off when they have an opportunity.

Alarm fatigue, and related mechanisms, can thus help explain how pains motivate pain-directed behavior. Moreover, alarm-fatigue-driven behavior is, on many occasions, fully justified. As Ash and colleagues point out,

When time is a scarce resource, and too many of the warnings or reminders are either irrelevant or overly predictable, irritated physicians who disregard these alerts are quite rational. (Ash, Berg & Coeira 2004, p. 109)

I will talk of *spammy pains*, by analogy to the importunate warning messages in decision support systems, to refer to the pain imperatives that, in point of fact, *are* irrelevant, unduly insistent, overly predictable, etc. A corollary of the treatment of pain-avoidance motivation just outlined is that this kind of behavior will be justified when the pain in question is spammy. For example, as I suggested above in Iris’s case, the insistent request to do something about the cavity is one that cannot be acted upon, and that interferes with a range of other sensible goals which *can* be fulfilled. It is therefore entirely rational for Iris to try to turn the (now spammy) pain request off, by taking a painkiller. Unfortunately, spammy pain is very frequent. Some examples, beyond cases such as Iris, in which the advice has already been well taken, yet pain keeps giving it, are:

- Pain produced during surgical procedures—here we have good reasons to believe that the pain’s recommendation to avoid bodily damage (say, an appendectomy) is bad advice. Cancer treatments such as chemotherapy and radiotherapy can also elicit pains the advice of which we know we should not follow (Portenoy & Lesage 1999).

- Neuropathic pain (Woolf & Mannion 1999), which is produced by nerve damage, not *bona fide* nociception. In this case, pain is giving the wrong advice (*Mind your hand!*, say, when it is the nervous system itself that needs minding).
- Hyperalgesia, a condition in which pains are more severe than they should (Hargreaves et al. 1988; LaMotte et al. 1991). In this case, pain is giving advice too peremptorily—it is presenting itself with the wrong range of weights for aggregation.

All of these four cases (pains whose advice has already been taken; treatment pain; neuropathic pain; hyperalgesia) justify taking painkillers or otherwise inducing analgesia. This list of spammy pains is far from exhaustive. In fact, a thought experiment, recently presented by David Bain as a difficulty for imperativist accounts of pains as reasons, provides yet another example. Bain has us consider a situation in which we know that the pain imperative is providing bad advice: an evil genius has rewired you so that gentle caresses cause excruciating pain, while real bodily damage does not.

[Avoiding the painful caresses] involves silencing rather than obeying [their] command; and what reason is there to silence it? What is so bad about being told to stop doing what you're doing? (Bain 2013, p. S79)

The deviant pain induced by the evil genius is a clear case of spammy pain: we know that it is providing bad advice, telling us to see to it that a non-existent bodily damage disappears, and its so doing has catastrophic consequences for our action-producing ranking: excruciating pain lets no other goal inform the subject's action plans. It is, therefore, quite rational for us to try to prevent this massive, counterproductive pollution of our action-producing systems, and switch off the malfunctioning warning system.<sup>7</sup>

## 7 Pains as Bad by Default

The foregoing discussion suggests that general hedonistic claims such as

**Bad by Default:** Unpleasant pain is *bad* for its subject, intrinsically and de-feasibly. (Bain 2013, p. S70)

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<sup>7</sup>It should be noticed that, while it justifies pain-avoiding behavior, this evil-genius pain does *not* justify behavior directed towards avoiding the non-existent *bodily* damage—although it might well motivate it.

are probably false. I have argued that it is justified to silence spammy pains, and the same considerations can be used to argue that it is *not* justified to silence non-spammy pains. These other pains are giving good advice, and you should listen: they are commanding you to get rid of a genuine bodily damage, and doing so with the adequate degree of peremptoriness.

Then again, it is difficult to assess how things really stand with respect to *Bad by Default*, as the “intrinsically and defeasibly” provisos, to a large extent, insulate the principle from empirical defeaters. For example, it might be thought that *Bad by Default* endorses taking steps to prevent all future pain as a reasonable course of action. This would be damaging for the principle, because such a course of action is very unreasonable: congenital insensitivity to pain with anhidrosis (CIPA) is a very serious disease, that often results in self-mutilations and premature death (Parvari & Moses 2003). Taking steps to be in the same condition as these patients would be extremely unwise. But the proponent of *Bad by Default* is likely to object that its defeasibility proviso can be used to resist the implication that the principle endorses becoming insensitive to pain: one should always bear in mind the possibility that one particular pain or other turns out to be good.<sup>8</sup>

What, then, is the import of *Bad by Default*? David Bain, in personal communication, has offered the following gloss on the principle: Consider two possible worlds. In world  $W_1$ , a certain damage in our body is satisfactorily dealt with, and eventually disappears, and there is a pain experience that commands that it is seen to it that the damage disappears. In world  $W_2$ , the same bodily damage is present, and is dealt with in an equally satisfactory way, but there is no pain involved. It is clear, Bain claims, that we prefer to be in the first world than in the second. This underwrites the claim that pains are intrinsically, if defeasibly, bad.

There are two possible interpretations of this possible-world gloss on the principle: in the first interpretation, the pain in  $W_1$  does not figure in an explanation of the eventual disappearance of the bodily damage. If so, then, the pain in question is spammy, and I have argued that such pains do justify pain-avoidant behavior, but in a wholly extrinsic manner. In the second interpretation, the pain in  $W_1$  is explanatorily relevant in the disappearance of bodily damage, which disappears through a wholly different process in  $W_2$ . If so, the two worlds are too different

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<sup>8</sup>It should be pointed out that this maneuver is, in general, problematic. Consider the following analogous principle:

Amputation is defeasibly bad for its subject.

It's not difficult to describe situations in which an amputation turns out all right for the amputee. (How about this one: you suffer the amputation of your right ear. This is bad, but it makes the serial killer working in your neighbourhood, who happens to be a hardcore Van Gogh fan, spare you.) But, despite of that, here it seems to be quite justified to take steps to prevent the possibility of amputation in general – wearing protective gloves in the chainsaw factory, say. Defeasibility doesn't seem to be disallowing this course of action here; it's unclear why it should be disallowing analogous courses of action, aimed at preventing the possibility of pain in general – which, as I have argued, would be very unwise.

to ground judgements of intrinsicity.

## 8 Conclusions

Imperatives can and often do function as both motivating and justifying reasons – those that are both commands and advice often will. Pains should be identified with such *benevolent dictator* imperatives,

Pains motivate body-directed behavior by changing the pain subject’s priorities “from the inside”—in the more perspicuous terms of the model canvassed above, by forcing their addressee to use a narrow range of weights in the aggregate that constitutes their action-producing ranking. Pains justify body-directed behavior in the circumstances in which such a forced aggregation is justified. A teleosemantic metasemantics of imperatives has the consequence that such cases of good, useful pains will be relatively typical.

One possible route for pains to motivate pain-directed behavior is by means of our extrinsic, but general, tendency to avoid spammy requests. Pains justify pain-directed behavior in the circumstances in which such a tendency is justified.

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