

Disgusting Smells and Imperativism

Abstract

I sketch and defend an imperativist treatment of the phenomenology associated with disgusting smells. This treatment, I argue, allows us to make better sense than other intentionalist alternatives both of the neuroanatomy of olfaction, and of a natural pretheoretical stance regarding the sense of smell.

1 Introduction

Intentionalism (Carruthers 2000; Tye 2000; Dretske 2003) is, roughly, 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) phenomenological component of certain experiences: it claims that the phenomenal character of pains, orgasms, and pleasant or unpleasant sensory experiences depends on their *imperative* intentional content. In Martínez's application of this approach to the case of painful experiences, for example, they have the following imperative content:

Pain Content: See to it that bodily disturbance d is no more!

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, have no correctness conditions; they are individuated by a set of *satisfaction conditions*. In particular, *Pain Content* is satisfied if and only if the bodily disturbance in question ceases to exist. Lacking correctness conditions, it is neither correct nor incorrect, and couldn't be.

Imperative content is not a new theoretical posit on the part of the imperativists. Some precursors: in the Lewis-Skyrms *sender-receiver model* of representation (Skyrms 2010), there are two *informational contents*: the amount of information that messages carry about states of the world, and the amount of information that messages carry about subsequent receiver acts. The latter is imperative content. In Millikan's *biosemantics* (Millikan 1984, 2004), two kinds of intentional

icons (roughly, contentful states) are recognized: indicative and imperative. An imperative intentional icon has as content “the last member of the series of things it is supposed to map onto and to produce” (Millikan 1984, p. 100). As a final example, in an unrelated body of work Pendlebury (1986) and Hanks (2007) make a case for the existence of contentful entities constitutively endowed with (indicative, imperative, interrogative) mood, based on considerations drawn from the philosophy of language.

Imperativism takes this independently postulated theoretical entity, and uses it to offer a compelling solution to several difficulties with representationalist treatments of affective phenomenology. According to these latter treatments (a prominent example is Tye 2009), the content of, e.g., pains is, just as the content of visual experiences, *indicative*, and presents the world as being somehow or other. This commitment to the truth-aptness of affective phenomenology makes representationalism (i.e., intentionalism of the indicative variety) vulnerable to at least two difficulties. First, the *opacity problem*: the close relation between indicative content and phenomenal character advocated by this family of accounts suggests that a commitment to representationalism about a certain kind of experiences goes hand in hand with a commitment with the existence of illusory experiences of that kind. But apparently affective phenomenology cannot be illusory: phantom-limb pain, it seems, is as genuine as real-limb pain (Block 2006). Second, the *raw feel problem*: it simply doesn’t *seem* as if the affective dimension of pains, or orgasms, had indicative intentional content at all; this provides evidence that, in point of fact, it doesn’t (Aydede 2006).

Both of these difficulties are satisfactorily dealt with by the imperativist: she can endorse the common-sense view that the characteristic unpleasantness of pains cannot be illusory: it just hurts. This is mirrored in (rather, depends on) the fact that imperative contents have no correctness conditions. Also, imperativists can agree that pains, unlike visual experiences, do not seem to represent the world as being somehow or other—this is compatible with their phenomenal character depending on their intentional content, if such content is imperative.

As the above discussion suggests, imperativism has been most thoroughly developed for the case of pain. Its proponents, on the other hand, often express hope that the approach can be applied to other experiences with affective phenomenology. In this paper I canvass an imperativist treatment of the olfactory experience associated with disgusting smells.

First, in section 2, I propose a method for uncovering the content of experiences, which, I argue, is better suited to the chemical senses (smell and taste) than the more widely used method which simply consults what the content of experience appears to be – and which, I claim, yields misleading results for modalities other than vision. I then apply this method to the sensational component of disgust. In section 3 I defend that this content is part of what fixes the phenomenal character of olfactory experiences associated with disgusting smells. That is, contrary to a usual assumption that disgust is an emotional response to (different from, causally downstream from) olfaction, I show how it can be literally part of

the olfactory experience. Section 4 is the conclusion.

2 Unconverging the Content of Experience

Many theorists agree with Batty (2010b) in accepting a *phenomenological constraint* on content attribution to experience:

[A]n assignment of representational content to an experience should respect what that experience is like. (Batty 2010b, p. 1139)

This is, undoubtedly, a sensible constraint: it would be very inept, e.g., to claim that an olfactory experience as of a rose has the content that the bus is coming. On the other hand, it is frequent to take the phenomenological constraint to be the *only* constraint on accounts of the content of experience. This confidence on the phenomenologically apparent can probably be explained (as many other features of the philosophical discussion on the content of experience), by the implicit bias of theorists in favour of visual experience. Indeed, vision appears to wear its content on its sleeve, and it has seemed to many philosophers that careful attention to the apparent character of visual experience is enough to disclose its content.

Be that as it may, in general, and contrary to what Batty and others appear to believe, observing the phenomenological constraint is not enough to zero in on a determinate content attribution for an experience. For many kinds of experience, in most sensory modalities, there are very many mutually incompatible content attributions that “respect what experience is like”. Equivalently, attributing experiences just with the phenomenally apparent content will often result in incomplete, rarified attributions. One example is Batty’s own discussion of the content of olfactory experience:

Like auditory experience, olfactory experience does not seem to present us with ordinary objects. But, unlike the auditory case, when I sniff around the brewing coffee, the smell does not even seem to occupy more or less determinate locations before me. Rather, the smell is simply present. (Batty 2010a, p. 515)

Olfactory experience, I have argued, represents that something or other ‘here’ is, for example, smoky and lavendery. (Batty 2010a, p. 534)

As Batty goes on to claim (*op. cit.*, p. 519), this lack of structure in the apparent deliverances of olfactory experiences is what pushes many philosophers to a sensationalist, non-representationalist view of olfaction. Batty regards the

surprising features of olfactory contents (which involve no objects, and no place but an unspecified 'here) according to her theory as resulting from the fact that she is focusing on olfaction proper, and not spuriously importing results of the investigation of visual contents into other sensory modalities. If I am right, ironically, some of these surprising features actually result from spuriously importing confidence on the phenomenological constraint as the be-all and end-all of content attributions from visual experience, where such confidence is less obviously misplaced, into olfactory experience, where it is unwarranted.

For another example in which the phenomenological constraint is likely to be insufficient, consider the qualitative aspect of disgust, one of the so-called *basic emotions*. These are two recent descriptions of this qualitative aspect:

Qualia, the mental or feeling component of emotion, may be at once the most central component of disgust and the most difficult to study. The qualia of disgust is often described as revulsion. (Rozin, Haidt & McCauley 2008, p. 759)

The qualitative component of the disgust affect program is a particular feeling of aversion, the all-too-familiar experience of revulsion and repulsion. From a subjective point of view, feelings of disgust can vary in intensity and texture from instance to instance, and more intense episodes are phenomenologically similar to nausea. (Kelly 2011, p. 16)

The first quote constitutes the whole discussion of the qualitative aspect of disgust in a review article by one of its most prominent theorists. The second, the whole discussion in a recent book-length treatment of this emotion. These two passages, I believe, nicely exemplify the shortcomings of a pure phenomenological-constraint approach to the content of experience: while the phenomenology associated with disgust can be far from negligible, indeed can be overwhelming, there is, *prima facie*, very little of it that lends itself directly to description in intentional terms. As Rozin and colleagues and Kelly put it, disgust is a feeling of revulsion, of aversion. The further question of what that feeling is *about* is somewhat baffling.

The right reaction to these examples, I submit, is to deny that the phenomenological constraint *gives* the correct content of a experience as opposed to, well, *constraining* it: Once phenomenology has provided its input, we still need theory to supplement it.

More concretely, the right process for attributing experiences with content has to combine respect for the phenomenologically apparent with an explicit account of whatever it is that makes an entity contentful. It is the latter account that yields the content attribution; although, of course, if the attribution does not abide by the former phenomenological constraint, this provides ground for revising the account. For an illustration of how this process is supposed to work, consider again how imperative content is fixed in Millikan's biosemantics:

Imperative Content: P is an imperative intentional icon of the last member of the series of things it is supposed to map onto and to produce. (Millikan 1984, p. 99)

The idea here is that imperative contentful states have the function of producing a series of effects. Some of these will be very proximal: if the icon in question is a certain pattern of neural activation in the amygdala, say, it will have the function of producing patterns of activation in neighbouring structures. But it will also be supposed to produce more distal effects; the most distal among these selected effects is its (imperative) content.

Biosemanantics, therefore, allows for the following straightforward route to content attribution to sensations of disgust: we should consult the empirical literature on disgust, find out what is the last member of the series of things disgust is supposed to produce. That will be its content, and that content will, in turn fix its phenomenal character. Indeed, disgust theorists routinely attribute this emotion with biological function. For example, the dominant psychological account of disgust (Rozin & Fallon 1987; Curtis, Barra & Aunger 2011; Schaller & Park 2011) sees it as a behavioural extension of the immune system:

The behavioral immune system is sensitive to perceptual cues indicating that pathogens may be present. When perceived, these stimuli trigger adaptive psychological responses – including the arousal of specific kinds of aversive emotional experiences... (Schaller & Park 2011, p. 99)

while Schaller and Park only claim that this is the occurrent causal profile of disgust, other theoreticians (e.g. the aforementioned Rozin and Kelly) are explicit in claiming that the avoidance of pathogens is at least one of the *functions* of disgust. The process I am endorsing here, then, would tentatively conclude that the phenomenal character of disgust depends on an imperative content along the lines of

Disgust Content: Stay away from that source of pathogens!

This imperative content, and the content-attributing strategy that endorses it are, I submit, more apt than an alternative based solely on the phenomenological constraint: While this content is not forced upon us by the phenomenology of disgust, and would be unreachable were we to insist on only attending to “what experience is like”, on reflection it seems to capture and explicate what the peculiar aversion associated to disgust is like – rather than merely relabel it, as appeals to its revolting character seem to do. In effect, disgusting phenomenology is a command for us to get away from pathogenic stuff. *This* is what disgust feels like: it feels like being compelled not to get polluted by disease-causing substances.

As a further example of this, we might say, *psychosemantics-first* method of uncovering the content of experience, I turn now to its application to olfactory experiences associated with disgusting smells.

3 Disgusting Smells

One common idea in the study of disgust is that certain kinds of perception *trigger* the aversive emotional experience characteristic of disgust. This is explicit in the quote above from Schaller & Park (2011). Kelly (2011), chapter 1, also characterizes the “qualitative component of the disgust affect program” as downstream from what he calls the “acquisition subsystem”.

This postulated separation between perceptual cue and affective experience is surprising. It doesn’t at all seem as if the olfaction of unpleasant smells, of the sort traditionally associated with disgust (e.g., the decay odour that emanates from faeces (Rozin & Fallon 1987) or rotten fish (Curtis, Barra & Aunger 2011)) is a mere affectively neutral precursor of an affectively charged experience. Olfaction itself has an obvious affective component.

I speculate that disgust theorists describe olfaction of disgusting smells as affectively neutral for lack of better theoretical options: smell is thought of as intentional (as providing “perceptual cues”, as Schaller and colleagues put it), and it is not obvious how intentional experiences could have an affective component. On the other hand, disgust itself *does* have an affective component which is, as Rozin puts it, “difficult to study”. So, they split explananda: olfaction has the intentionality, disgust the affectivity.

This split is artificial, and sits ill with neuroanatomical data, which clearly supports the idea of a privileged link between olfaction and emotion:

The perception of smell is dominated by a hedonic (pleasantness-unpleasantness) dimension, and exposure to odorants produces robust approach and withdrawal responses... Such phenomena reflect the inextricable anatomical connections between the mammalian limbic and olfactory systems. (Zald & Pardo 1997)

An inextricable connection which, for example, involves bidirectional projections between the olfactory tract and the amygdala (Haviland-Jones & Wilson 2008, p. 237).

Imperativism makes another option available: the phenomenal character of olfaction depends, at least partly, on the very same kind of imperative contents that ground the qualitative aspect of disgust more generally, exemplified by *Disgust Content*. That is, the olfaction of disgusting smells *is* literally part of disgust phenomenology. What one takes in through one’s nostrils is (not

information about how the world is, but) a command to avoid a certain source of pathogens.

For an intentionalist, this proposal has at least the following going for it: there are no others. That I am aware, available accounts of olfactive experience in the philosophical literature have consistently neglected its affective dimension. This is all the more surprising, given the fact that, as Zald and Prado put it in the passage quoted above, this dimension all but dominates olfactive phenomenology. Again here, the explanation might be in a lack of theoretical alternatives. As Batty (2010a) points out, a number of philosophers (Christopher Peacocke most conspicuously; see Batty *op. cit.*) still endorse what she calls the *Reidian sensational view* – the view that olfactory sensations are raw feels, causally upstream from intentional states but not themselves intentional. The other main philosophical account of olfaction is the view (endorsed by Batty, or Tye (2000)) that olfactory experience has *indicative* representational content. None of these two theoretical options is particularly well-suited to accommodating disgusting smells. In particular, the difficulties, alluded to above, that representationalism appears to have with painful phenomenology crop up again in the case of disgusting smells. The *opacity problem*: the idea of smells that are “illusorily disgusting” is problematic in the same sense that illusory pain is: a disgusting smell is disgusting even if there are no chemicals in the air to cause it. The *raw-feel problem*: the fact that Reidian sensationalism is an alive theoretical option in the case of olfaction (but not much anymore in the case of vision) attests to the difficulty of cashing out olfactory phenomenology in indicative intentional terms.

If these are the reasons for the neglect of affectivity in accounts of olfaction, imperativism can help: the imperativist can claim that this affectivity depends on the same kind of imperative that fixes the qualitative character of disgust; an imperative such as *Disgust Content*. If this is correct, it explains the appeal of “Reidian sensationalism” about olfactory experiences: the (un)pleasantness of those experiences does not represent anything in the usual sense (i.e., it has no indicative content). It also explains why the idea of illusorily disgusting smells strikes us as somewhat off: after all, the unpleasantness of such experiences has no correctness conditions.

4 Conclusion

I have advocated for letting theory, specifically psychosemantic theory, guide us in our theorizing about the content of experience. One reward of this approach, I have argued, is that it might uncover plausible, informative content attributions that the dominant alternative approach (which only recognizes a “phenomenological constraint” as the sole guiding principle) is bound to miss. Such is with *Disgust Content* as the content of olfactive experiences of disgusting smells.

In particular, such a content attribution facilitates a fruitful reorganization of the theoretical material in the study of disgust: one is no longer forced to consider olfaction as a perceptual precursor to other affective disgust qualia; olfactive experience emerges as disgusting in its own right, in agreement both with common sense and with neuroanatomical data. It also helps deal with the extension to olfaction of two well-known problems with intentionalist accounts of pain: what I have called the opacity and the raw feel problems.

These features, I submit, warrant further investigation of imperativism as an initially plausible account of the affective dimension of olfaction.

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