

The response model of moral disgust

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Abstract The philosophical debate over disgust and its role in moral discourse has focused on disgust’s epistemic status: can disgust justify judgments of moral wrongness? Or is it misplaced in the moral domain—irrelevant at best, positively distorting at worst? Correspondingly, empirical research into disgust has focused on its role as a cause or amplifier of moral judgment, seeking to establish how and when disgust either causes us to morally condemn actions, or strengthens our pre-existing tendencies to condemn certain actions. Both of these approaches to disgust are based on a set of assumptions that I call, in what follows, the *evidential model* of disgust. This paper proposes an alternative model, which I call the *response model*. Instead of looking at disgust as a cause and justification of judgments of moral wrongness, I will argue that disgust is better understood as a *response* to wrongness. More precisely, I argue that disgust is a response to norm violations, and that it is (sometimes) a fitting response insofar as norm violations are potentially contagious and therefore pose a threat to the stability and maintenance of norms.

Keywords Disgust · Moral psychology · Moral epistemology

1 Introduction

Disgust’s role in moral judgment is contentious: there is doubt over whether disgust is in fact implicated in moral judgment, and there is skepticism about whether disgust has any justified role to play in the moral domain. This paper addresses the debate over moral disgust and suggests a new understanding of disgust’s role in the moral domain:

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as a response to moral wrongness, disgust serves as a signal that blocks the imitation of norm violations. In other words, disgust inoculates against social contagion. This view develops the account I introduced in [Plakias \(2013\)](#), which argues, contra the disgust skeptic, that disgust's role in the moral domain might be analogous to its role in the physical domain: namely, to track and protect against social contagion. I develop this proposal while critiquing assumptions made in the debate over disgust skepticism. Specifically, while I think it is correct that violations of moral norms are genuinely contagious, it is often assumed in the debate that disgust's role must be justificatory: if disgust plays any legitimate role in morality, it is the role of justifying or serving as evidence for our moral judgments. This paper argues instead that disgust serves as a kind of moral signaling, counterbalancing the role imitation plays in norm acquisition and maintenance. The question is not whether disgust justifies our moral beliefs, or is evidence of moral wrongness, but whether disgust is ever a fitting response to moral wrongdoing. I suggest that it is.

In Sect. 2, I offer an overview of the philosophical debate over moral disgust, describing the two main views and the arguments for each. I then go on to explain that, while these views differ with respect to disgust's legitimacy in the moral domain, they share certain assumptions about the nature of disgust and its role in moral judgment, assumptions that I will go on to reject. In Sect. 3, I give an overview of the nature of disgust and the evidence for its involvement in the moral domain. In Sect. 4 I develop this alternative model—the response model—in more detail, before going on in Sect. 5 to defend it against some objections.

2 Two questions about disgust

[Kelly \(2011: p. 23\)](#) distinguishes a number of questions we can ask regarding moral disgust: the “core question,” is “whether or not being disgusted by something provides good reason to think it is immoral or morally problematic.” But there are other questions we can ask concerning disgust's role in our moral practice: for example, “is disgust ever the morally ideal response to certain attitudes or practices?” The first type of question focuses on disgust as evidence of moral wrongness, asking whether disgust can justify judgments of moral wrongness, and whether we ought to trust moral judgments that are based on disgust. This assumes a model of moral disgust on which disgust influences our moral deliberations and plays a role in bringing about our moral judgments. I'll refer to this model of disgust as the *evidential model*. The second question focuses on disgust as a response to moral wrongness, asking whether disgust is “ever the morally ideal response to certain attitudes or practices”, or whether it is “morally permissible or problematic to invoke disgust in the service of altering behaviors or changing minds?” This assumes a model on which disgust is a response to moral judgment, and not a justification for it; I'll refer to this model of disgust as the *response model*. It's this second question, and the model of disgust it introduces, that I explore in what follows.

First, a word of clarification is in order. Kelly asks us to consider whether disgust is ever a “morally ideal response.” But “ideal” sets a high standard—there may be a number of responses in our emotional repertoire that we don't think ideal agents

would share, but which are, in our less-than-ideal circumstances, indispensable. For example, ideal agents would probably not experience jealousy, or anger. A truly ideal agent might not experience guilt, either, since a truly ideal agent might never do anything to feel guilty about. However, when we ask about the role that disgust plays in moral practice, we are not asking about the practice of ideal agents, but about the role it plays in *our* practice. So, in arguing for the response model, I'll understand it as focused, not on the role disgust would play in the practice of ideal agents, but on the role it should play in our own admittedly imperfect practices. And I argue that, for us less-than-ideal agents, disgust is sometimes a fitting response to moral wrongness. In the remainder of this section, I review the debate over disgust's epistemic status. I then explain some assumptions underlying this debate.

2.1 Disgust skeptics versus advocates

Philosophical debates over the moral relevance of disgust have tended to focus on Kelly's 'core question,' asking whether disgust is good evidence of moral wrongness, and whether it can justify moral judgment. Disgust *skeptics* deny that disgust ever justifies moral judgment. Disgust *advocates* (to use Kelly's terminology) maintain that disgust does have a valuable epistemic role to play in moral judgment. In arguing for disgust's importance for moral and legal judgment, Kahan writes, "There are indeed situations in which properly directed disgust is indispensable to a morally accurate perception of what's at stake in the law" (1999: p. 63). Kass describes disgust as "the emotional expression of deep wisdom, beyond reason's power fully to articulate it," an experience in which we "intuit and feel, immediately and without argument, the violation of things that we rightfully hold dear" (1997: p. 20). Kekes (1992: p. 443) describes "deep disgust" as "revulsion at acts that subvert the moral foundation of a society," and agrees with Kass that it is "an instinctive emotional reaction," which the average person may not be able to justify—"But that does not mean that their reaction is not justifiable." Kahan, Kass, and Kekes see disgust as a form of recognition that a serious moral wrong is being committed; for these advocates, disgust is elicited by the violation of a particular kind of norm, one which is essential to "the central core of our humanity," (Kass 1997: p. 20) or whose violation "threaten[s]... society's conception of civilized life" (Kekes 1992: p. 443). For these writers, the experience of disgust is evidence of wrongness, because the emotion tracks especially egregious violations of moral norms. To experience disgust is to recognize that such a violation has taken place.¹

The tracking thesis—that disgust tracks violations of a specific kind of moral norm—illustrates the kind of relationship in virtue of which disgust could justify judgments of wrongness. If the presence of disgust is evidence of a morally relevant property or fact (in this case, that a certain kind of norm has been violated) then it is a relevant input into moral judgment. But there are worries about the viability of this

¹ Fischer (2016) offers a variation of this type of view, on which disgust is not evidence per se of moral wrongness, but rather a heuristic alerting us to the fact that a norm has been violated. Insofar as Fischer maintains that disgust plays a justificatory role in moral judgment, his view is best understood as an evidential account.

kind of tracking account. Why do some norm violations elicit disgust, but not others? In short, any account that relies on a tracking relation faces a challenge: to explain why disgust tracks only a subset of moral violations, in a way that doesn't look ad hoc. What is it about *these* violations that poses such a threat to our conception of humanity—aside from the fact that they are revolting? If the disgust advocate can't give a satisfactory answer to this question, the tracking relation looks less like a vindication of moral disgust and more like an outline of the shape any such vindication would have to take.

We should also be wary of accounts that rely entirely on examples of moral disgust involving physically disgusting behaviors (such as grisly killings or other bodily mutilations, cannibalism, etc). Indeed, I suggest that the role and function of moral disgust is best understood by excluding physically disgusting moral violations from our discussion. If particularly grisly killings elicit disgust from us, is that because they threaten our conception of civilized life, or because they involve a behavior that's among the most universal elicitors of core, physical disgust? This is a particularly important question for the disgust advocate to answer. If the violations that the advocate's account relies upon as examples of disgust are all *physically* disgusting, one might wonder whether the disgust advocate has even identified examples of morally disgusting behaviors to begin with, rather than just physically disgusting ways of violating a moral norm. And if the latter is the case, then such accounts don't actually identify a morally relevant property shared by all morally disgusting acts; rather, they pick out a subset of morally wrong acts that happen to share the property of being physically disgusting. This is a kind of tracking account—disgusting violations are tracking physical disgust—but it is not morally illuminating; rather, the relationship between disgust and morality it uncovers is incidental.

The disgust skeptic denies that disgust plays any positive epistemic role in moral judgment. Of disgust's moral irrelevance, Kelly writes, "the fact that something is disgusting is not even remotely a reliable indicator of foul play," and claims that "the default position to the use of disgust or repugnance to justify moral condemnation should be one not of trust but suspicion... feelings of disgust should be given no weight in deciding whether an issue... is morally acceptable or morally problematic" (2011: p. 148). The skeptic has two objections to moral disgust, both having to do with disgust's history. First, disgust has, in the past, led us to moral judgments and actions that we now regard as mistaken—it is associated with racism, homophobia, dehumanization of out-groups, and even genocide. Thus we should be particularly wary of evaluative judgments based on or accompanied by feelings of disgust. I agree that disgust has led to terrible actions and attitudes. But so have other emotions. So this line of argument threatens to show too much. We could also use it to raise skeptical worries about moral judgments based on guilt, anger, pride, and even moral conviction itself. This line of objection also turns on claims about which content is essential to disgust, claims I discuss in Sect. 5 below, so I return to it there. Second, the skeptic points to disgust's evolutionary origins as protection against parasites and poisons—against physical contagions—and argues that, for this reason, disgust is unlikely to be any sort of reliable guide to moral wrongness. There are two reasons for this: first, there's no analog of contagion in the moral domain; second, disgust's protective function favors false positives. Thus, the fact that disgust has been co-opted from the

physical into the moral domain means it's unreliable when deployed there. With regard to the first point, in earlier work (see Plakias 2013), I argued that there is an analog of contagion in the moral domain; social contagion is a real, documented phenomenon. I return to this point in Sect. 4 below where I develop the positive account, so I won't go into too much detail here, but it's worth pointing out that if the social contagion account is correct, the disgust skeptic's disanalogy falls through. What about the second point—that evolutionary pressures designed our disgust response to be overly cautious, thereby yielding a tendency to produce false positives? This objection is a potential worry for the disgust advocate—and one I discuss in Sect. 3—but only if we accept a certain picture of disgust and its role in the moral domain. The idea of a false positive assumes the possibility of a 'true positive,' a concept that in turn makes sense only if we understand disgust as providing information (either accurate or inaccurate). In what follows, I'll say a bit more about the picture of disgust and its role in moral judgment that the evidential model assumes. I'll then look at some empirical work on the nature of disgust, and assess the extent of the support for this model, before going on in Sect. 4 to introduce my preferred alternative—a version of the response model.

2.2 Skeptics, advocates, and evidence

The debate between skeptics and advocates takes the evidential model as its starting point. While the two sides disagree over whether disgust ever *successfully* justifies moral judgment, they both view it as aspiring to play this role. This reveals a commitment, if only tacit, to the following assumptions about disgust:

- *Disgust is an input* Because their concern is with disgust's ability to justify moral judgment, the skeptic and advocate both share an assumption that disgust (sometimes) is an input to moral judgment. It's not that justifications must always play a causal role—post facto justification is real, though the term is usually used pejoratively—but that a justifying emotion or belief that was causally inert, that was never causally implicated in producing the belief, would be an odd sort of justification. Furthermore, from the skeptic's perspective, at least, if disgust never actually causes moral judgment, then skeptical worries about its influence are not particularly pressing. Compare the case of skeptical worries about the role of perception in belief formation: skeptical arguments to the effect that beliefs based on, say, visual experience are unjustified are especially worrisome precisely because so many of our beliefs are in fact caused by such experiences. If disgust in fact plays no role in bringing about our moral judgment, the skeptic's arguments don't present a pressing practical worry. And as a matter of fact, most skeptics do want to claim that disgust plays a significant role in moral judgment. For example, Kelly (2011: p. 23) writes, "some of the most notorious downstream effects of disgust involve the influence it can exert on evaluative judgment about a variety of subjects."
- *Disgust is informative* The evidential model assumes that disgust carries a kind of cognitive content, in virtue of which it serves as evidence for judgments of wrongness. Skeptics and advocates needn't share a specific theory of what disgust's content is, or even of what disgust tells us. Certainly, Kelly won't endorse Kass'

view of disgust as containing a “deep wisdom.” But skeptics share the advocates’ view that disgust portrays its elicitor in a certain manner, and that this portrayal is part of what (attempts to) justify a moral condemnation of the elicitor: “Part of the disgust response is that one experiences revulsion, and that contamination potency and offensiveness are projected on to the elicitor...” (2011: p. 27). And Kahan explicitly endorses an analysis (from Miller 1997) on which “disgust is not an instinctive and unthinking aversion but rather a thought-pervaded evaluative sentiment” (1999: p. 64). Miller himself—while not explicitly allied with the evidential model of disgust—is adamant that “disgust necessarily involves particular thoughts... Disgust must be accompanied by ideas of a particular kind of danger” (1997: p. 8).

- *Disgust’s primary role is first-personal* Disgust’s role in causing or justifying moral judgment is fulfilled via the information the emotion conveys to the person experiencing it—the sense of offensiveness, revulsion, and contamination. The epistemic function of disgust depends, therefore, on the first-personal experience of disgust. Disgust doesn’t have to be private, of course—it can be and frequently is shared, and reported to others, and Kelly in particular notes that the disgust face and other physical reactions can trigger empathic disgust in others—but on the evidential model, disgust is primarily of interest in its role in producing moral judgment in the person experiencing it.

What evidence do we have for these claims? One source of support for disgust’s role in moral judgment is language: acts of violence, discrimination, and cheating are frequently described as “disgusting”—not just in English, but in other languages as well (see Vasquez et al. (2001), cited in Kelly p. 23; see also Goddard (2014) for a discussion of how disgust is expressed in various languages). Another source is the justifications we invoke in legal contexts. Kahan (1999: p. 67) points to a case where, having committed a particularly sadistic and gruesome murder, the guilty party petitioned the court to have some of his property returned to him, which included pornography and a photograph of the victim. In denying his request, the appeals court wrote that “to return the property would be so offensive to basic concepts of decency treasured in a civilized society, that it would undermine the confidence that the public has a right to expect in the criminal justice system.” Kahan argues, “this decision will strike almost everyone as indubitably correct... there is in fact no other viable basis for that intuition other than the one the court gave—namely, the disgustingness of Beldotti’s request.” And Nussbaum (2004: pp. 154–158) points out, “there is one sexual practice that apparently causes no harm... that seems so disgusting and awful that most people will immediately feel that it ought to be illegal, even if disgust is the only thing we have to say about it. This practice is necrophilia...”²

However, none of these is actually evidence for disgust’s causal or justificatory role. Disgust’s linguistic association with moral judgment doesn’t show that the emotion comes prior to such judgment; it only shows that the two tend to co-occur. For all the evidence shows, we make moral judgments and then express them with the language

² As noted, however, Nussbaum is a disgust skeptic, so she is reporting this view, not endorsing it. I mention it here as an example of a case where disgust is taken to cause moral judgment.

of disgust (indeed, this is similar to the picture I endorse, as I explain further in Sect. 4). Our invocation of disgust as justification might appear more promising, since in the legal contexts Nussbaum and Kahan describe, we're explicitly appealing to disgust as a basis for our judgments. But in fact, these examples don't show that disgust is serving as an input or justification for moral judgment; they leave open the possibility that disgust is mediating between judgments of wrongness and judgments about what punishment is appropriate. The same can be said for historical and literary uses of disgust in moral contexts: these examples, while persuasive evidence of a link between disgust and moral judgment, don't establish a causal or justificatory direction for that link. For all these examples show, moral judgment is *prior* to disgust, and the emotion—or its expression—is an output of the moral judgment, as opposed to vice-versa.

In addition to disgust's role in our moral language and our legal system, philosophers have cited both its evolutionary origins and experimental evidence to support the claim that disgust plays a significant role in causing and justifying moral judgment. In the next section, I examine the nature of disgust and the empirical evidence for its involvement in the moral domain.

3 The empirical evidence: What does disgust actually do?

The experience of disgust consists, first and foremost, in a visceral type of rejection: to be disgusted by something is to withdraw from it physically, to recoil, and to feel revolted by it. One might feel nauseated, or even gag. To experience an object as disgusting is also to experience it as contaminating; this is part of what separates disgust from distaste, another visceral form of rejection. Distaste will cause the rejection of a certain food, but not of any food that's been associated with it, whereas disgust causes the rejection of the offending object as well as anything with which it's come into contact. That's because the contaminating powers of disgusting objects are easily transmitted to other substances through contact, however brief. Moreover, once an object has come into contact with something disgusting, it acquires the power to contaminate other objects. If a formerly clean cloth has touched a disgusting object such as a decaying corpse, it is disgusting, and anything it touches becomes disgusting too.

This sensitivity to contamination and contagion has led to the theory that disgust evolved to protect our evolutionary ancestors against invisible threats in the environment, namely, poisons, parasites, and pathogens (for discussion, see [Chapman and Anderson 2013](#); [Kelly 2011](#), Chapter 2; [Rozin et al. 2008](#); [Tybur et al. 2013](#)). Because of their invisibility, these things can't be avoided directly, so, the theory goes, disgust evolved to track them by motivating avoidance of objects typically associated with them. It's not a perfect tracker; as we have discussed, disgust is overly cautious (because the cost of a false positive is a lot lower than that of a false negative). If a cockroach has been dipped into a glass of juice, subjects are reluctant to drink it, even if that cockroach was sterilized first ([Rozin et al. 1986](#)). Disgust began as a physical response that motivated us to avoid contact with potentially contaminating substances, and helped enforce hygiene-related behaviors. This is why disgust skeptics claim it is out of place in the moral domain: informing us about moral wrongness is not what disgust was designed to do.

Kelly (2011: p. 119) calls this the *co-opt thesis*: the idea that disgust originally protected against physical threats but was later “recruited” to play a role in the social domain. According to the co-opt thesis, the disgust system’s flexibility when it comes to elicitors of disgust is part of what makes it suitable for its role in the moral domain: disgust can be attached to a variety of behaviors. Some of these are, as we’ve seen, behaviors relating to ‘core’ physical disgust—like how to deal with bodily functions and secretions. Others, though, are more abstract, like incest. Kelly points out that in such cases, disgust motivates punishment—“violators would be ostracized, avoided, considered dirty and contaminated”—and compliance—“it is repulsive even to imagine oneself violating such norms” (2011: p. 120). The claim that disgust motivates compliance and punishment might seem like evidence of an input role for disgust (and indeed, Kelly seems to take it as such).³ But in fact all the co-opt thesis establishes is that disgust is some sort of corollary of moral judgment, and not that disgust is input or evidence for judgments of wrongness.

One way to see this is by considering the analog of physical disgust, which motivates us both to avoid its elicitors and to respond to contact with them in certain ways (by cleansing ourselves, or removing the offending object). But we don’t react this way to physically disgusting objects and then judge that they’re dirty and contaminating; rather, our reaction to them is based on a prior judgment that they’re dirty. In the physical case, disgust isn’t the basis for a judgment of dirtiness—rather, the disgust is based on an evaluation to the effect that the object is dirty and contaminating. The moral case is similar. Insofar as disgust motivates norm compliance, it does so because it is a reaction *to* the idea of violating a norm. And insofar as it motivates punishment, it does so as a reaction to the recognition that a norm has been violated—or might be violated. As Kelly reports, “even merely *considering* violating these norms... can trigger a disgust-like reaction” (120). The fact that imagining the norm violation is a trigger for disgust suggests that the recognition of a norm violation is input for the disgust reaction, and not the other way around.⁴

This is not to say that the co-opt thesis itself is false or flawed. It is a persuasive theory about the extension of a physical response into the social and moral domain. It’s also compatible with the account given below. But it is not evidence for the claim that disgust is an input to moral judgment. Rather, it supports the idea that disgust’s role in the social domain is as a response to norm violations—to deter violations in others, by motivating punishment (of others) and negative feelings (in oneself) in response to the recognition that norms have been violated.

What about the experimental evidence demonstrating that disgust influences moral judgment? Here, too, we fail to find support for the claim that disgust is an input to moral judgment. Studies on the experience of disgust and its effect on moral judgment

³ Thanks to an anonymous referee for pointing this out to me, and for drawing my attention to this point of Kelly’s.

⁴ An anonymous reviewer points out that disgust might itself be an evaluation, rather than a reaction to an evaluation. I don’t disagree; I use the term ‘reaction’ here to remain agnostic about the extent to which emotions contain evaluative content (and whether this content is propositional). While this question is an important one, and obviously relevant to the discussion at hand, my goal in this paper is to offer an account of the role disgust plays in our moral discourse and practice, and not to enter into debates over the correct theory of emotion.

typically proceed by inducing subjects to feel disgust, and then asking them to judge the wrongness of various acts, to see whether disgust will either amplify the severity of judgments of moral wrongness, or even cause moral judgments where there wouldn't otherwise be any (as measured by the reactions of non-disgusted control subjects). Disgust can be induced in a variety of ways: subjects are asked to write about a time they experienced disgust, or asked to complete surveys in disgusting conditions, or watch a disgusting video clip (Schnall 2008; for a critique and discussion of replication attempts, see Johnson et al. 2016). Subjects are then asked to rate various acts or scenarios for moral wrongness, and these ratings are compared to those given by subjects in conditions that involved either a different emotion or no emotion at all. For example, Schnall et al. had subjects rate the severity of moral transgressions; the experimental manipulation concerned the amount of fart spray present in the room where subjects filled out their questionnaires. They reported, “mild-stink participants and strong-stink participants were both more severe in their average moral judgments than were control participants,” and concluded that “the presence of extraneous disgust can make moral judgments more severe” (2008: p. 1099).

One criticism of these studies is that finding that disgust influences moral judgment isn't itself grounds for epistemic alarm. As May (2014) points out, the size of these effects is insufficient to shift a judgment from 'moral' to 'immoral,' or even from 'neutral' to 'immoral.' So while it looks like disgust may amplify existing moral judgments, it's not clear that disgust is playing a significant role as input or evidence for such judgments.

This issue can be raised more generally about experimental investigations of moral disgust. Recall the various ways disgust is elicited in such experiments: through having subjects recall a memory, watch an unrelated film clip, fill out surveys in smelly or messy rooms, and feel disgust through hypnotic induction. In these cases, the *physical* disgust induced is unrelated to the resulting *moral* judgment. Thus, if there is some effect of disgust on that judgment, it does look epistemically problematic, since subjects are being influenced by a factor that is *ex hypothesi* irrelevant to the moral evaluation at hand. But notice that this is a different issue than the one we begin our philosophical debate with, namely, *can* disgust serve as a good reason for moral judgment? Compare the case of anger: if I am angry because my favorite baseball team recently lost an important game, and because of this, I judge a moral transgression more harshly, my response is unreasonable. But this doesn't tell us anything about the role of anger more generally—it certainly doesn't show that anger *can't* be a good reason for moral judgment.

The limitations of the evidence for disgust's causal role in moral judgment are twofold: first, the evidence does not support the claim that disgust causes moral judgment, and second, it's unclear whether the evidence supports the weaker claim that disgust amplifies moral judgment. Even if it were to support this latter claim, it's unclear (at best) what the philosophical significance of that claim would be—how worried should we be if unrelated disgust were to cause slight shifts in the severity of our judgments of wrongness? I think the answer remains, not very. Lastly, even if we concede that the evidence does show a significant causal effect of disgust on moral judgment, this doesn't have much impact on the question of whether disgust *can* be a good reason for judgments of moral wrongness, since the experiments in question

involve scenarios where the disgust is, by design, unrelated to the moral wrongness under consideration.

There are exceptions to this: studies where disgust is elicited by moral violations instead of physically disgusting ones. Some such studies have identified the characteristic disgust *face* as a response to perceived violations of fairness norms. Chapman et al. (2009) studied the faces of subjects involved in an ultimatum game and found that when subjects were on the receiving end of an unfair offer, they responded with a disgust face. Cannon et al. (2011) likewise report that, in response to violations of fairness norms, subjects spontaneously made disgust faces. And Danovitch and Bloom (2009) report that kindergarteners tend to say that disgust faces “go with” moral violations, and use terms like “yucky” to describe such behavior. This suggests that expressions of disgust are a natural response to moral transgressions, a suggestion I explore in the next section.

4 The response model: An alternative understanding of disgust

The account I am proposing contrasts with evidential accounts of disgust: on my view, disgust is not evidence of moral wrongness, and it doesn't justify moral judgments. Its primary role in the social and moral domains is not to generate moral judgment or to amplify existing moral judgment. Instead, disgust is a response to witnessing violations of norms. Its role is threefold: from a first-person perspective, disgust motivates a distancing from its elicitor, thereby deterring us from imitating the behavior that elicits it. From a second-person perspective, expressions of disgust are a form of social rejection of the individual at whom they're directed. Since rejection is unpleasant, this serves as a sort of punishment, and deters similar behavior in the future. Because disgust is also easily recognizable (both in its facial and verbal expressions), it also signals to third parties that the eliciting behavior is objectionable and should not be imitated. Call this the *response* model: disgust's role in moral discourse and practice is as a response to moral judgment. Its suitability for the moral domain should be assessed, then, by examining whether it is a fitting *response* to moral judgment, and not whether it provides a good evidential basis for moral judgment.

The response model does not rely on any of the assumptions made by the evidential model and discussed in Sect. 2. Specifically, it does not maintain that disgust is an input to moral judgment, that disgust is informative, or that disgust is personal. Instead, according to the response model:

- *Disgust is an output of moral judgment* Whereas disgust skeptics and advocates conduct their debate on the assumption that disgust plays a causal role in moral judgment, the response model is not committed to this assumption. Instead, according to the response model, disgust is a reaction to the judgment that an act violating a moral norm has taken place. Rather than taking disgust to be information on which to base the judgment, the response model takes disgust to be informative of the judgment. That is, disgust is not a source of information on which the judgment is based, but a way of informing others of that judgment. Its role is to communicate that a moral judgment has taken place.

- *Disgust is not informative* As stated above, disgust is not, on the response model, a source of information, but a means of communication. This means that the response model is not committed to understanding disgust in terms of any specific content or information that is essential to the emotion. The response model doesn't have to deny that the emotion of disgust has cognitive content, but it isn't committed to the view that it does. As far as the response model is concerned, the content relevant to disgust's role in the moral domain is, primarily, that it communicates disapproval and rejection of the elicitor. While revulsion and feelings of pollution may be useful in this regard, they are by no means essential.
- *Disgust's primary role is not first-personal* Understanding disgust in terms of the aforementioned roles and features results in a view of the emotion as first and foremost a public one. Disgust is not understood as a private, emotional experience that informs our private judgment, but rather as a public response to a behavior that informs others both of the norms in effect (via the information that one has been violated) and of the disgusted agent's disapprobation. This public element of disgust means that it is, in one sense, justificatory: while its role for the disgusted individual is not evidential, for second- and third-parties observing a disgust reaction, the expression of disgust is evidence for the judgment that a norm has been violated. So disgust's publicity allows it to play a justificatory role for others, if not the disgusted individual.⁵

To fully appreciate the significance of this last point, it will help to understand disgust as the solution to a certain kind of problem: a problem engendered by our ability to quickly adapt to new situations and to conform to new behaviors and norms. In what follows, I explain the problem of social contagion as it relates to moral—and other—types of norms, and explain how the disgust response is a solution to this problem. But pointing to a practical application of disgust is not the end of the story. I then go on to outline the conditions that make disgust a fitting response, before turning to some objections.

4.1 When disgust is useful

In earlier work, I argued that disgust's role in the social domain is analogous to its role in the physical domain. In both cases, disgust protects us against contagious threats—in the physical case, from poisons, parasites, and pathogens; in the social case, from behaviors that violate and thereby threaten to undermine our norms. Whereas the physical need for a disgust response stems from the difficulty in detecting these invisible threats, the social role of disgust stems from our tendency to imitate those around us. This tendency is useful, and allows us to adapt our behavior quickly and relatively effortlessly, adopting new norms—complex norms that would otherwise require cum-

⁵ I owe this point to an anonymous reviewer, who points out that disgust might play a justificatory role for others even if not the disgusted individual herself. I think this is an interesting observation, and it opens up the possibility that the literature on disgust's epistemic role has focused excessively on first-person justification. I think this is a possibility worth taking seriously, and I hope that the discussion here of disgust's function as a moral signal, rather than as a subjective state, will go some way to remedying this situation.

bersome explicit instruction—and behaviors with relative ease. The problem is in knowing when to stop imitating and conforming, and it's here that disgust can be useful, for the reasons outlined above.

First, others' behavior can inform us about what norms are actually in play in a given situation. Descriptive norms characterize what people actually do; observing others gives us evidence of which descriptive norms are being followed. Because of our imitative nature, when we observe that a descriptive norm is being followed, we are more likely to follow it ourselves. So, if I see others littering, I am more likely to do the same (see [Cialdini et al. 1990](#) for a discussion of both littering specifically and injunctive and descriptive norms more generally). And even if we know what norms are supposed to be in play in a given situation, we can look to others for evidence about how strictly these norms are being followed. Injunctive norms tell us what we ought to do in a given situation; by observing which behaviors are subject to others' approval and disapproval, or to social sanctions, we gain information about the injunctive norms in place in a given situation. Observing others' behavior is a source of information about both these kinds of norms, and influences our own behavior accordingly. Others' failure to follow a rule may lead me to believe that the norm is not in play, or it may lead me to believe that there are no consequences for failing to comply with the norm. Especially in cases where obeying the norm in question incurs some cost, forming this latter belief may be enough to deter me from complying. Finally, there may be cases where my reasons for conforming to the norm are conditional on the belief that others will do so too. Norms of reciprocity and trust are like this (see [Bicchieri and Xiao 2009](#)), but so might be norms about cheating, waiting one's turn, etc. My motivation for standing politely in a line, waiting my turn, depends on the notion that others will likewise respect the queue. If I come to believe that others are cutting in line, my motivation for complying with the norm that dictates queuing is diminished. So just as observing others can motivate norm compliance both directly (as when we imitate others' behavior) and indirectly (as when we see evidence that others are complying), observing norm violations can undermine norm compliance both directly and indirectly: we can change our beliefs about what norms are in play, our beliefs about whether or not others are complying with those norms, and, in cases where our motivation to comply is contingent on others' compliance, our beliefs about whether or not we would be rational to comply with those norms. Lastly, if witnessing norm violations makes us less likely to comply in any of the above ways, it may also make us less likely to expect compliance from others, and so make us less likely to punish or otherwise repudiate violators.

In sum: while imitation is a highly beneficial strategy that allows individuals to learn quickly, imitating indiscriminately is a bad strategy. Mistakes happen. People break the rules. Indiscriminate imitation allows mistakes and deviant behaviors to propagate. The challenge, then, is to find a way to inoculate norms against the threat posed by errors and deviance. By allowing for rapid communication about which behaviors to imitate and which to reject, disgust offers just such a means of inoculation.

That's the descriptive side of the story: disgust is best understood, not as an input to moral judgment, but as an output—a response to moral violations that serves to deter would-be imitators. Where does this leave the philosophical debate over disgust? As I've said, if the account here is correct, we should look beyond the debate between the

disgust advocate and skeptic; the question is no longer simply whether disgust provides good reason for moral judgment. Instead, we can turn the question on its head: is moral wrongness good reason for disgust? I think that, in light of the considerations above, it is. Specifically, disgust is a fitting response to violations of moral and social norms, because such violations are (socially) contagious.

4.2 When disgust is fitting

In this section I'll describe the conditions under which disgust is a fitting response to moral wrongness. My approach will differ from other attempts to link disgust to wrongness insofar as I won't focus exclusively on the content of the violation itself; I take a more expansive view of the conditions for fittingness, including both the norm violation and the conditions under which it takes place in the features that make disgust a fitting response. My use of 'fitting' here is inspired by D'Arms and Jacobson (2000: p. 70), who offer the notion as the answer to the question, "what kind of endorsement is involved in the judgment that an emotion is, on some occasion, an appropriate response?" The endorsement in question is not the sort that involves judging that the emotion would be prudentially good to feel, or that the emotion is a morally appropriate one; rather, it's a kind of endorsement we engage in when we ask whether an emotion presents things to us as they really are. "In this respect," D'Arms and Jacobson write, "the fittingness of an emotion is like the truth of a belief" (2000: p. 73).

One clarification, involving a difference between the use of 'fitting' that follows and that introduced by D'Arms and Jacobson, is in order before proceeding. The analogy with belief in the previous paragraph might suggest that invoking 'fittingness' necessarily involves imputing a kind of content to an emotion—that the very idea of an emotion being 'fitting' involves that emotion having a kind of cognitive content that in turn sets the standard for fittingness. For example, envy might be thought to involve content to the effect that the object is worth possessing (c.f. D'Arms and Jacobson 2000: p. 66); therefore, envy is fitting when (among other conditions) it is directed at something worth possessing. I don't want to argue with this as an interpretation of fittingness, and I think it is the sense in which D'Arms and Jacobson intend the concept to be understood. However, as will become clear in this section and the next, I prefer a somewhat thinner view of emotion—particularly of disgust. On the view I'm advancing, what's essential to disgust is not some particular belief about its object, but a particular set of responses and behaviors. It might seem inappropriate, then, for me to use a concept like 'fittingness'. But I do so, for two reasons: first, I think that behaviors can convey beliefs or attitudes, so that even if an occurrence of disgust doesn't carry a particular belief, the disgust response can convey information. Second, my focus throughout the paper, and in what follows, has been on disgust as a *response*, and not just as an emotion. The difference is that a response involves a set of behaviors, and isn't a private phenomenon. The response of disgust includes the disgust face and the behaviors associated with disgust—withdrawal, protection against contamination, and so on—which can be present even in the absence of the feeling itself.

My claim is that disgust is (sometimes) a fitting response to norm violations. On the account defended here, disgust is a fitting response to violations of norms that the

disgusted party endorses. What makes a norm violation fit-for-disgust is that norm violations are socially contagious: left unchecked, a norm-violating behavior will spread through a population and will tend to undermine the existence of that very norm. Social contagion isn't limited to norm violations; many behaviors, both positive and negative, are contagious (such as giving to charity and recycling).

Here an objection immediately presents itself. Since so much behavior is contagious, shouldn't we expect disgust to be much more widespread than it actually is?⁶ So for example, Fischer writes, "I suspect that most negatively perceived behaviors are contagious, at least to some degree or another, and it's plain disgust is marshaled against only a few of them" (2016: p. 685). Doesn't this show that contagion is not what makes violations fit-for-disgust? Answering this question requires a closer look at contagion. Specifically, in the case of behaviors that violate norms, what circumstances contribute to whether or not a behavior is likely to spread?

First, not all behavior is contagious. Whether a behavior spreads through social groups is an empirical question, and there is a growing body of research examining which behaviors are contagious and to what degree. For example, divorce, alcohol use, and smoking are all contagious (see [Christakis and Fowler 2008](#); [McDermott et al. 2013](#); [Rosenquist et al. 2010](#)). So is violence (see [Bond and Bushman 2016](#)). On a more positive note, generosity and cooperation also show evidence of being contagious, as do behaviors such as picking up litter and helping strangers (see [Keizer et al. 2013](#); [Tsvetkova and Macy 2014](#)). But other behaviors are not: behaviors involving sexual orientation, for example. This last might seem quite obvious (so perhaps no citation is needed, but if so see [Brakefield 2014](#)), but given that homosexuality elicits disgust among some groups, it is worth noting, as it highlights the fact that not every disgust elicitor is actually fit for disgust—since homosexuality is not contagious it is not fit for disgust, even among those individuals who espouse norms proscribing it.

Whether a behavior is contagious depends on which institutional structures are in place to prevent the spread of that behavior. The most relevant of these, for our purposes, is institutional punishment. When a norm violation is subject to punishment, its potential for contagion is constrained: it's known that the act in question is not endorsed—that it violates an injunctive norm—and the punishment serves as a deterrent to imitators. Again, the question of whether a behavior is 'potentially contagious' is less informative when considered in the abstract than in concrete situations: many behaviors are in theory potentially contagious, but whether a behavior is contagious, in a particular instance, group, or circumstance depends on what rules and regulations are in place. For example, if a community has strict rules requiring recycling, and violators are punished, and this is known, then failure to recycle is less likely to be contagious than if there are no explicit rules, and no punishments for failures to recycle. In the latter case, disgust is a fitting response to failures to recycle because in the latter kind of case failures to recycle are potentially contagious in a way that they are not in the former kind of case.

This observation allows us to make some predictions about the types of case where moral disgust is fitting. Moral disgust (again, as opposed to purely physical disgust

⁶ I thank an anonymous referee for bringing this point to my attention.

annexed to moral violations; see discussion in Sect. 2 above) will be fitting in response to norm violations that are not subject to legal rules or restrictions and/or which are not subject to punishment—because these violations will be the potentially contagious ones, not in virtue of the nature of the behavior on its own, but because of the social context of the behavior. And this does seem to be what we find, when we exclude from consideration those violations that are disgusting in virtue of involving a physical disgust elicitor. Recall the examples introduced in Sect. 2 above: racism and homophobia, cheating, cloning and other biotechnologies. In the first category, we have an attitude that is not subject to legal regulation (discrimination may be legally actionable but on an institutional level; acts of discriminatory behavior are not typically punished at the level of the individual actor). In the second category, the behavior often goes undetected and unpunished. Finally, there are behaviors such as cloning and genetic modification, and technological innovations such as lab-grown meat, which are often judged to be disgusting. These are instances where the law is not caught up to technological reality, so it is often unclear whether a behavior is punishable or not. Giubilini (2016: 237) specifically cites these types of acts as problems for a contagion-backed account of disgust, since, he claims, there is no such thing as “cloning contagion”. While it’s true that we’re unlikely to read about an epidemic of cloning behavior sweeping the nation’s high schools, this is due to practical limitations; attitudes towards cloning and genetic modification are more readily transmitted, perhaps, than the corresponding behaviors—at least for now. And these attitudes might have implications for behaviors other than cloning: Midgley (2000: p. 8) points to the “sweeping change of attitude” towards nature generally, and species boundaries specifically, as one of the main fears of those disgusted by biotechnology; according to Midgley, the same norm (respect for nature and species boundaries) underlies objections to a spectrum of technology, from genetically modified crops to human-animal chimeras.

In sum then, what makes a behavior fit-for-disgust is that it is a violation of a norm endorsed by the disgusted individual, and that the violation is contagious. While it’s true that the set of contagious behaviors is larger than the set of morally disgusting behaviors, this can be explained by the fact that not all (potentially) disgusting behaviors will realize this potential, because in some cases, the potential will be blocked by other contextual features, thus rendering disgust misplaced. This means that what is fit-for-disgust depends both on the evaluative attitudes in place (which norms are endorsed by the agent and/or his or her group?) and on other moral and social sanctions in place.

One consequence of this is that the question whether disgust is a fitting response to some norm violation can’t be answered in the abstract. While there may be certain norms whose violation would never, in any circumstances, be fit-for-disgust, in most cases, we will need to look at the context of the norm and the hypothetical violation. The inclusion of contagion as one of the fittingness conditions on disgust means that we won’t always know, a priori, which behaviors are disgusting. Our disgust response is extremely context-sensitive, a point that’s often underappreciated. Writers typically include saliva as a disgust elicitor, but neglect to point out that whether another’s saliva is disgusting depends on whether it’s ingested atop a muffin or via a kiss. Likewise, whether a norm violation is disgusting may depend on the circumstances in which it takes place. And of course our disgust response misfires, in both the physical and moral cases. Above I mention the example of homosexuality, which is not a contagious

behavior and therefore not fit-for-disgust—despite the fact that many individuals have found it disgusting. These sorts of cases may seem like trouble for the defender of disgust, and indeed, the possibility of mistaken cases of moral disgust might be trouble for an account that wanted to use disgust as *evidence* of moral wrongness. But on an account that views disgust as a (sometimes) fitting *response* to wrongness, its potential to misfire is no more problematic than my tendency to feel anger at someone who (unbeknownst to me, unintentionally) steps on my toe on a crowded bus.

5 Objections and replies

I have proposed that disgust be understood as a fitting response to moral violations not because it serves as the evidential basis for an internal judgment to the effect that the elicitor is morally wrong, but because it acts as a signal to others (including the individual at whom it is directed) that the eliciting act is not to be imitated. More specifically, my suggestion is that disgust is fitting as a response to moral violations because moral violations have contamination potency—like physically disgusting actions, they are contagious; they present a threat that spreads to objects (or individuals) with which they come in contact. Witnessing or otherwise coming into contact with a norm violation makes one more likely to become a norm violator. Because disgust serves both as a signal not to imitate norm violations, and distances us from norm violations via ostracism and rejection, it protects us against such contact. In other words, moral violations have a property that makes them fit for disgust—contagiousness.

This aspect of the account may be useful in dispelling a potential concern about whether I have said enough to distinguish my account from the evidential model. One might worry that the two are not actually competitors. Couldn't disgust be used as post facto justification for moral judgment—invoked to justify moral condemnation even if it were not causally responsible for that judgment? In principle, yes. A consequence of offering an analysis in terms of fittingness is that it gives conditions for the proper attribution of an emotion to a state of affairs (or in this case a behavior such as a norm violation). Given this, to claim that an emotion is fitting in some situation is to claim that the situation has certain features that license that emotion. So one can work backwards from, say, the claim that disgust is fitting to the claim that the elicitor violates some norm. In this sense disgust can still justify claims that a behavior is morally wrong. But this is not, I claim, disgust's primary function or its role. And it's not the standard by which we should judge disgust's success in the normative domain. Rather, disgust's primary role is as a reaction to moral wrongness. As such, we should expect it to track wrongness, and to inform us about its presence—but we should not expect it to serve as the basis for judgments of wrongness, as the skeptic and advocate would have us do.

One objection to this kind of account comes from the disgust skeptic, who argues that disgust has inherently problematic content. Because of such content, one might argue that disgust is never a fitting response to a moral violation. Some skeptics point to disgust's dehumanizing tendency: the fact that disgust tends to portray its objects as dirty, polluted (and polluting), and animal rather than human. For example, Kelly and Morar write, "Disgust dehumanizes and stigmatizes, and so is never a morally

acceptable response to transgressions... disgust is intrinsically ill-suited to be used as a social tool” (2014: p. 15). And Nussbaum writes of disgust: “its thought-content is typically unreasonable, embodying magical ideas of contamination, and impossible aspirations to purity, immortality, and nonanimality, that are just not in line with human life as we know it” (2004: p. 14). The skeptic argues against the inclusion of disgust in our moral lives on the grounds that disgust dehumanizes people by portraying them as animals; it also encourages us to view others as polluting and contaminating, thereby leading us to see them as threats to be eradicated. Disgust leads to the language of vermin, pollution, disease; when leveraged against individuals and groups, such language encourages campaigns of exclusion, discrimination, and even genocide.

The skeptic isn’t wrong about this. I agree that *when leveraged against individuals*, the language of disgust has historically led to discrimination and even atrocity. One would have to be naïve to ignore the historical association between the language of disgust and campaigns against ethnic and religious groups. But there is nothing inherent in disgust requiring that it be directed at individuals, rather than at actions. Of course, insofar as individuals carry out actions, and insofar as it is individuals who are typically the recipient of social sanctions, disgust will in some sense be directed at an individual, but this is consistent with saying that it is the behavior, and not the individual, which is disgusting. We might be disgusted by someone’s saliva without being disgusted by that individual; likewise, an act of tax evasion might disgust us without leading us to see the evader as less than human. What I reject about the skeptic’s account, then, is not its historical accuracy, but the implication that these pollution-ascribing, dehumanizing features of the disgust response are necessary components of moral disgust. Instead, I suggest that they are the result of directing disgust at actors rather than actions. And this tendency to globally evaluate individuals rather than their actions is far from unique to disgust: it lies at the foundation of some of the oldest and most venerable traditions in Western ethical thought—both Aristotle and Kant can be read as arguing that it is the actor, rather than the action, that is the locus of moral appraisal. There’s room for disagreement about this, of course, but my point is that even if disgust is often directed at persons rather than actions, making a global moral appraisal of an actor is not itself problematic. And the content the disgust skeptic ascribes to disgust’s appraisal, while problematic, is not necessarily part of that appraisal.

Furthermore, the skeptic may be correct that disgust usually contains such content. But are animality, dehumanization, and “impossible aspirations to purity” really *essential* to disgust, such that the emotion doesn’t just include them but mandate them? This is a tricky question: how do we negotiate the content that defines an emotion? I won’t offer an answer here. But what I will say is that none of the physiological markers of the disgust response require such content. Nor does the sensitivity to contamination that’s typically taken to be characteristic of disgust: nothing about sensitivity to transmitting contamination is necessarily magical (indeed, physical and social contamination are both empirically documented phenomena), nor does contamination necessarily imply animality. Our animal nature is often a source of compliments: sly as a fox, or fast as a cheetah.

The skeptic might weaken her claim somewhat—perhaps such content isn’t essential to disgust, but it is often associated with it. Doesn’t this suffice to show that the

disgust response is one we ought to reject? To answer this question properly, we have to distinguish the desirability of the disgust response from its fittingness. Failure to do so will result in what D'Arms and Jacobson call “the moralistic fallacy”: conflating “the question of whether some emotion is right to feel, and whether that emotion gets it right” (2000: p. 66). If disgust doesn't *essentially* ascribe dehumanizing content to its object, then the disgust response doesn't necessarily involve the mistaken appraisal of a person or group as less than human or as polluting. To the extent that the response is accompanied by or associated with such appraisals, it is bad to feel. But it is not *unfitting*.

Another objection to the account I've given here is that I haven't really explained disgust's role in the *moral* domain. I've argued that disgust plays a role in maintaining norms, but I haven't said anything to explain its relevance to moral norms specifically. This is true, and it is intentional. How to individuate the moral domain is a controversial question; whether and how we can draw a fixed boundary distinguishing moral from social norms remains subject to disagreement (see Kelly 2011: p. 126 for discussion). Without taking a stand on this question, we can allow that the *expression* of disgust is the same whether the elicitor is physical, social, or moral. (A point that's supported by the facial expression studies described above.) The fittingness conditions I outline here are conditions for the fittingness of a disgust response. And I've claimed that what makes such responses fitting is the violation of a norm. Norms govern not just moral and social behavior, but physical behavior as well. There are norms about washing one's hands after using the bathroom, about displaying one's genitals, about hiding and disposing of bodily fluids, about the proper kinds of food to eat and the proper treatment of those foods... Given that disgust polices norms ranging from the physical to the social to the moral, an account of the way in which it polices them should be expected to encompass all these domains. And because disgust isn't being used as moral justification, the fact that the account developed here doesn't analyze disgust in terms that have specifically moral relevance isn't a shortcoming. It can even be seen as an asset of the view: on the understanding developed here, disgust is a fitting response to norm violations that can be used to maintain norms in several domains, not just the moral.

6 Conclusion

I've argued that disgust has a legitimate role to play in moral discourse and practice, and that contrary to what most prior authors have supposed, this role is not justificatory—disgust's function is not to provide evidence for judgments of moral wrongness, but as a response to those judgments and a way of making such judgments publicly known. Thus, while building on my earlier (2013) argument that disgust in the moral domain is best understood in terms of the phenomenon of social contagion, the account defended here offers an understanding of disgust's role that departs from the usual framing of the debate between disgust skeptics and advocates.

Disgust is undoubtedly an emotion with an ugly side. Its language is sometimes used to express condemnation of individuals or groups, with morally disastrous results. But if the account I'm offering here is correct, this is an abuse of disgust. The emotion's real

use is as a way of communicating rejection of norm violating behavior. In essence, disgust is a form of punishment—a quick, automatic, relatively cheap punishment. The enforcement of moral and social norms via punishment is not, perhaps, the most pleasant aspect of morality on which to dwell. Social rejection and ostracism are not phenomena that present human nature at their finest. In this regard, it is true that—to return to the question we began with—these phenomena would not be present in the morality of ideal agents. Yet we are not ideal agents, and the morality of such agents would not be ideal for us. Disgust exists, and is fitting, because we are less-than-ideal: because we do not always have the option to contemplate our actions, but must sometimes imitate others'. In this respect, we can remain wary of disgust, since it exists because of our shortcomings as moral agents and deliberators, while acknowledging that it has a role to play in our everyday moral practice.

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