## Foul Behavior

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Disgust is a visceral, unpleasant emotion that evolved to protect human beings from the threat of disease and infection. However, disgust has since infiltrated moral thought. From the perspective of its abundant critics, the humble origins of moral disgust betray the emotion as primitive and ill-suited for morality (Nussbaum 2004; Kelly 2011; Bloom 2013). Critics argue that disgust is inherently untrustworthy and tends to lead those afflicted by it morally astray, at its worst encouraging prejudice and mistreatment toward members of marginalized groups.

Social conservatives are widely thought to experience moral disgust toward the "impure" and the "unnatural." Take Leon Kass (1997), former chairperson of George W. Bush's Presidential Council on Bioethics. According to Kass, it is only through experiencing disgust that we can recognize that various new medical technologies are morally unacceptable—including genetic enhancement, stem cell research, and some forms of assisted reproduction. Many liberal philosophers may be skeptical of disgust because they believe it is implicated in moral and political values that they already reject.

On the contrary, however, disgust is entangled with moral values that are shared by liberals and conservatives (Chapman and Anderson 2013). On both the left and on the right, people are morally disgusted by cheaters, liars, and hypocrites, by unscrupulous lawyers and corrupt politicians. Disgust has a troubling dark side, but no more than other negatively valenced emotions like anger. And like other negative emotions, disgust also plays laudable roles in morality.

After drawing an empirical portrait of the emotion, I will respond to prevailing arguments that disgust is unreliable and harmful. Disgust has a bad reputation, but its reputation is undeserved. More positively, I will explain how moral disgust can be a fitting moral attitude. Disgust plays an important role in moral thinking and behavior, and it is fitting when it accurately reflects the character of certain moral wrongs.

### 1. Disease and Infection

Human beings are disgusted by a staggering array of foul, loathsome messes: rotten and unfamiliar food; feces, vomit, and other effluvia; filth, blood, and guts; bugs, worms, and rats; sores, lesions, and disfigurement. These common elicitors of disgust are clues to its most basic function. Rotten food, bodily fluids, decomposing corpses, and the rest are all sources of harmful bacteria and other micro-organisms that threaten health and well-being. The basic function of disgust is to alert us to the presence of pathogens and parasites that cause disease and infection.

Disgust plays a distinctive causal role in our psychology that supports its basic function. Systematic effects on motivation, expression, and cognition facilitate disease avoidance. Different emotions have quite different effects on motivation—different "action tendencies." Fear motivates flight. Anger motivates confrontation. Disgust, by contrast, motivates withdrawal, avoidance, distancing, expulsion. When you see or smell rotten meat, for example, disgust leads you to retract, avoid contact, and rid yourself of it. Fittingly, the threat of disease or infection is met not by flight or confrontation, but by avoidance and expulsion.

Many emotions are associated with distinctive facial expressions that are difficult to suppress and easy to recognize. Disgust is expressed by the "gape face," which consists in wrinkling of the nose, retraction of the upper lip, extrusion of the tongue, and sometimes vocal retching. Emotional expression often has an immediate functional purpose. The gape face associated with disgust prevents foreign objects from being ingested and encourages oral expulsion. Emotional expression is also communicative. The gape face communicates to others that something is disgusting, to be avoided and expelled.

Because diseases are often contagious, human beings have an incentive to communicate and recognize disgust. If others around you are disgusted by something, then very likely you should be disgusted by it too. Thus, recognition of disgust appears to be "empathic" or "contagious." That is, noticing that someone else is disgusted often involves experiencing disgust yourself, and this facilitates cultural transmission of information about local vectors of disease (see Kelly 2011: 88-98). Researchers find that an area of the brain, the insula, is active not only when people experience disgust but also when they recognize the emotion (Phillips et al. 1997; Wicker et al. 2003; Jabbi et al. 2008). Damage to the insula leads to deficits in both capacities (Calder et al. 2000; Adolphs et al. 2003).

Disgust has systematic effects not just on motivation and expression but also on cognition. Like other emotions, disgust recruits attention and memory. Obviously, it pays to notice and remember vectors of disease and infection. A more distinctive cognitive effect of disgust is that it imparts a sense of contamination. When you are disgusted

by a repulsive substance other things that come into contact with it become disgusting too. If some foul ooze dribbles onto your food, you are likely to infer that your food is now contaminated and that it is also disgusting (see Rozin et al. 2008). This has curious effects when disgust is moralized, as we'll see later on, but when the elicitor threatens disease or infection, a contamination sensitivity tracks the easy and invisible spread of harmful micro-organisms.

To understand how disgust executes its basic function of disease avoidance, I have focused until now on the downstream effects of disgust—on motivation, expression, and cognition. I have argued that these effects have a clear functional rationale in protecting us from pollution—motivating avoidance and expulsion, expressively communicating information about biological threats, and tracking contamination. Later on in the essay, I will attempt to account for their rationale when the objects of disgust are moral wrongs that share similarities with disease and infection.

First, however, we must flesh out our understanding of pathogen disgust, and this means moving away from its downstream effects and turning upstream. Disgust is triggered by a number of perceptual cues across several sensory modalities. We are disgusted by the color and taste of food that correlate with rot and toxicity, the appearance and smell of bodily fluids, the moisture levels and consistency of materials that indicate pathogenic growth (Oum et al. 2011). But disgust is also elicited and modulated by abstract categories. In this essay, indeed, mere descriptions of foul substances are likely to provoke disgust in some readers. To take another example, one and the same odor can provoke disgust or not depending on whether people categorize the source as feces or cheese (Rozin and Fallon 1987; see also Herz and von Clef 2001).

Many authors seem to think of disgust as a blunt psychological instrument. On the contrary, however, disgust exhibits significant flexibility (see Tybur et al. 2013). High levels of hunger inhibit disgust toward rotten food (Hoefling et al. 2009). Women are more easily disgusted during the first trimester of pregnancy, when their physiological immune system is suppressed and both mother and fetus are especially vulnerable to disease and infection (Fessler et al. 2005). Mothers are also less easily disgusted by the smell of dirty diapers belonging to their own child, compared to those of other children, even when they don't know explicitly which is which (Case et al. 2006).

It is a design feature of our psychology that disgust can be elicited by abstract categories and modulated by context: the emotion can be attuned to new elicitors depending on whether the object of disgust merits withdrawal, avoidance, distancing, and expulsion. As we'll see next, the flexibility of disgust makes possible the recruitment of disgust in morality. And the fittingness conditions for moral disgust parallel those for pathogen disgust.

## 2. Co-option

In the first instance, disgust functions as a "behavioral immune system" (Schaller and Park 2011), detecting and containing sources of disease and infection. The human body has an elaborate suite of physiological immune responses, and disgust, owing to its causal role, executes a similar function at the level of behavior. The function of disgust is less obvious, however, once we extend our focus beyond the primary elicitors of disgust that are so clearly unified by disease and infection. In particular, what's the point of feeling disgust toward moral wrongs? To undertake normative evaluation of disgust, we must first explore how and why disgust seems to have been co-opted in social cognition generally and moral cognition in particular. (I will leave it as an open question whether the mechanism driving co-option is biological evolution, cultural evolution, or learning mechanisms.)

As several authors notice, disgust is not housed in a single, unified psychological system (e.g., Strohminger 2014). The emotion has been extended to new domains and these extensions have given rise to new functions, along with corresponding modifications to the causal role of disgust. According to several theorists, disgust was co-opted for sex and other areas of interpersonal life, and it was also co-opted for morality (Rozin et al. 2008; Kelly 2011; Tybur et al. 2013).

Daniel Kelly (2011) articulates a view that has garnered widespread acceptance in the scientific literature on tribal instincts: disgust was co-opted in social cognition for the sake of marking group boundaries. In our hunter-gatherer past it was vitally important to coordinate with members of one's own group and to avoid members of other groups. The reason was not just that other groups are a source of disease, but also that successful social interaction depended on shared norms of coordination that vary in content across groups. Thus, humans acquired a disgust-sensitivity to markers that signaled outgroup status—to people who speak, dress, or act differently and exhibit other cultural differences. Outgroup members came to seem disgusting and therefore to be avoided. Once again, disgust is flexibly regulated by experience and context. People transcend group boundaries, thankfully. Exogamy has always been common.

With this development, disgust acquired a new, social dimension. But it wasn't until norms related to ingroups and outgroups came into existence that disgust became a moral emotion (on demarcation of the moral domain see, e.g., Kumar 2015-a.) Ultimately, these norms prohibit not only interaction with outgroup members, but also behavior that is incongruent with group identity. Thus, norms arose that forbid "taboo" behavior, and violations of certain taboos came to elicit disgust. This is especially likely when the behavior is independently disgusting, for example, when the taboos involve food or sex. Disgust was apt for the purpose of backing ingroup norms because it motivates not just

normative compliance, but also withdrawal and distancing from those who violate ingroup norms.

Moral disgust plays a causal role in our psychology that is similar to pathogen disgust, but it exhibits several differences. Most obviously, disgust has become attuned to new abstract cues: norm violations. Furthermore, although moral disgust and pathogen disgust have a similar phenomenology, moral disgust tends to be less intense and is less often associated with retching or nausea. More importantly, moral disgust motivates distancing that is social as well as physical (cf. Tybur et al. 2009: 107). Even when physical distancing is not feasible, those who are disgusted by violations of ingroup norms are less likely to socially interact with the offender. Moral disgust inspires physical withdrawal, to be sure, but it also motivates more active social exclusion and ostracism. This protects oneself and others from potentially hazardous offenders by creating physical and social distance (see Hutcherson and Gross 2011), and it also punishes offenders by depriving them of physical and social contact.

So far, we have examined how disgust achieved a foothold in moral thought. The original function of moral disgust was to detect and punish violations of norms related to ingroups and outgroups. Like many other emotions, disgust motivates compliance with moral norms. But unlike many other emotions, disgust motivates avoidance and exclusion, which serves to protect victims and punish offenders.

The causal role of disgust includes more than just its action tendency, however, and later on in the essay we'll examine how disgust's contamination sensitivity and the empathic nature of disgust recognition also bear on its role in moral thought and practice. Ultimately, I will argue that moral disgust is fitting when the wrongs that elicit it are polluting and infectious—and I will also argue that some moral wrongs are *genuinely* polluting and infectious. But first let's examine empirical work that displays more clearly the relationship between disgust and morality. This work clarifies the role that disgust currently plays in moral thought, but it also raises worries about moral disgust that must be addressed before any defense of the emotion can be mounted.

# 3. Moral Disgust

Many authors are skeptical that disgust is genuinely a moral emotion (Inbar and Pizarro 2014; Bloom 2004; Oaten et al. 2009; Royzman and Sabini 2001). David Pizarro, for example, argues that people feel disgust toward moral violations only when they happen to be independently disgusting, i.e., when they involve vectors of disease and infection. An ingroup violation is not generally disgusting, but transgressing a sexual taboo is; murder is not generally disgusting, but murder that happens to involve blood and guts is; killing sentient beings is not generally disgusting, but for moral vegetarians partici-

pating in the activity by eating their flesh is. Indeed, Rozin and colleagues find that people who become vegetarians for moral reasons are more likely than those who become vegetarians for health reasons to experience disgust at the sight and smell of meat (Rozin et al. 1997). Pizarro concludes that disgust has only an accidental connection to morality.

In a comprehensive review of the empirical literature, however, Hannah Chapman and Adam Anderson (2013) amass a large and convergent body of evidence indicating that pure moral violations—that is, moral violations that do not involve independently disgusting stimuli—frequently and consistently elicit disgust. Researchers across several studies asked participants to recall a disgusting event and they cited not just food, feces, and filth, but also pure moral violations. For example, participants are disgusted when someone takes advantage of an innocent person (Rozin et al. 1999a; Nabi 2002; Tybur et al. 2009). In other experimental work, researchers presented participants with different types of moral violations and asked them to rate on a scale how much disgust, anger, and other emotions they felt. Certain pure moral violations were associated with selfreports of disgust, indeed, higher than self-reports of other emotions (Hutcherson and Gross 2011; Gutierrez et al. 2012; Simpson et al. 2006). Just to take one example, embezzling money from a bank elicits disgust more so than anger. Furthermore, in priming studies exposure to moral violations is associated with implicit measures of disgust, like increased use of available hand soap (Zhong and Liljenquist 2006; Jones and Fitness 2008). Finally, neuroimaging evidence is consilient with the idea that pure moral violations elicit disgust (Moll et al. 2005; Parkinson et al. 2011; Schaich Borg et al. 2008). Evidently, then, disgust has been recruited in morality, and it is not present only when moral violations happen to be independently disgusting. The empirical work shows too that moral disgust is not limited to violations of ingroup norms.

At first glance, however, further empirical research suggests that disgust is allied with conservatism. First of all, disgust seems to correlate with conservative norms and values. Self-identified conservatives tend to have a higher disgust-sensitivity than self-identified liberals (Inbar et al. 2009a, 2012). High disgust-sensitivity also predicts disapproval of gays (Inbar et al. 2009b), voting for John McCain in the 2008 presidential election (Inbar et al. 2012), and more punitive attitudes toward criminals (Jones and Fitness 2008). Unsurprisingly, on the assumption that it backs ingroup norms, disgust also seems to be linked to ethnocentric prejudice (Navarette and Fessler 2006).

Jonathan Haidt and colleagues suggest that disgust is a conservative moral emotion in virtue of its link with so-called "purity" values. They argue that purity values are backed by disgust (Haidt and Joseph 2008; Graham et al. 2013; cf. Rozin et al. 1999b) and, furthermore, that purity values are espoused preferentially by conservatives (Haidt and Graham 2007; Graham et al. 2009; Koleva et al. 2012; Haidt 2012; see also Helzer and

Pizarro 2011). Thus, for example, typical purity values include respect for sacred religious artifacts and prohibitions against intemperate behavior.

The evidence reviewed immediately above casts disgust in a conservative role, and so it is not surprising that authors who argue for the value of moral disgust tend to do so as part of a broader defense of socially conservative ethical positions (Kass 1997; Kekes 1998). In fact, however, disgust is not just a conservative moral emotion (see Miller, 1997; Kahan 1999). We will examine relevant empirical evidence more closely later on in the essay, but for the moment notice that liberals experience moral disgust toward many different types of moral wrongs. Along with many conservatives, liberals are morally disgusted by exploitative sex, including incest and pedophilia. Perhaps more often than conservatives, liberals are morally repulsed by meat eating, cigarette-smoking, and environmental degradation. And more interestingly, as I will argue in detail later on, cheating, dishonesty, and exploitation also commonly elicit moral disgust.

One reason that liberals experience moral disgust is that they are in fact committed to ingroup norms and purity values—it's just that the content of these norms and values is different from those espoused by conservatives. Whereas some conservatives are morally disgusted by homosexuality and interracial marriage, liberals tend to be disgusted by homophobes and racists. The reason, perhaps, is that some liberals treat homophobes and racists as people who violate ingroup norms. Furthermore, the putative empirical link between purity values and conservativism appears to be an artifact of the particular moral positions that researchers happen to have probed (cf. Duarte et al. 2014). Liberals also treat some moral issues as matters of purity—just not the same issues. For example, some liberals see the natural environment as a sacred resource and are disgusted by activities that defile it, like driving an SUV or producing GMO food products.

Originally a biological adaptation for disease, disgust seems to have been co-opted in morality because of its ability to back ingroup norms and purity values. Disgust has since made other inroads in morality, however, and we will continue to chart its path over the course of the essay. At present, the relationship of disgust to ingroup norms and purity values suffices to motivate prima facie skepticism about the emotion—not skepticism that it is implicated in morality, which we have already considered and rejected, but skepticism that it *should* be implicated. Several authors argue that the science of disgust provides independent justification for this skepticism. As a general matter, emotions are likely ineliminable from morality, but these authors argue that disgust, in particular, should be eliminated.

# 4. Unreliability

In his 2011 book *Yuck: The Nature and Moral Significance of Disgust*, Kelly offers what is likely the most detailed and illuminating account of disgust yet available. Kelly develops an account of the biological functions of disgust and the psychological mechanisms underlying it. In the final chapters of the book, Kelly uses his account of disgust to criticize its role in moral thought (see also Kelly 2014; Kelly and Morar 2014). His central argument is that disgust is an unreliable guide to moral evaluation. The idea that disgust frequently misfires is commonly voiced by moral philosophers, but Kelly makes the most careful case for this view. Still, as I will show, his case is unconvincing.

The basic function of disgust is to offer protection from disease and infection. However, Kelly argues that this function leads to hypersensitivity. When it comes to warding off disease and infection, he argues, natural selection tends to be risk-averse. In general, being over-sensitive to germs is more adaptive than being under-sensitive: better to forgo a healthy meal than to expose oneself to dangerous viruses and bacteria. As Kelly puts it, disgust follows the rule, "better safe than sorry." Thus, the mechanisms underlying disgust tolerate many false positives (disgusting but not pathogenic) in order to minimize false negatives (pathogenic but not disgusting). Even when we know explicitly that some foul substance is harmless, we often can't help feeling disgusted by it. Thus, in studies by Paul Rozin and colleagues, participants are disgusted by and refuse to consume fudge that is shaped like feces, juice that has been exposed to a sterilized insect, a meal that has been placed in a brand new bedpan, etc. (Rozin et al. 1986). Thus, Kelly argues that disgust is hypersensitive, and therefore that it is an unreliable signal that should be accorded no weight in moral thought.

Kelly is certainly right that the cues that elicit disgust are imperfectly correlated with the presence of pathogens and parasites. Often when we experience disgust toward unfamiliar food, urine, dirt, worms, etc., the elicitor poses no genuine hazard. As I have already noted, however, disgust is highly flexible. People are conditioned out of disgust responses when they repeatedly find that some elicitor is innocuous. New parents, for example, lose their disgust reaction to dirty diapers, especially those belonging to their own child (see Case et al. 2006). So, it is not obvious that pathogen disgust is as unreliable as Kelly alleges. The reason is that disgust is too flexible to read its current operation directly from its evolutionary function.

Suppose, nonetheless, that Kelly has made a plausible case for the unreliability of pathogen disgust. Even then, the argument does not tell similarly against moral disgust. Disgust gains a purchase in morality through the flexible acquisition of a new set of abstract cues: norm violations. So, whether moral disgust is reliable or unreliable depends on whether people acquire cues that reliably indicate the presence of genuine moral vio-

lations. However, the same evolutionary logic which predicts that disgust toward primary elicitors follows the rule, "better safe than sorry," does not typically apply to moral disgust. In morality false positives are not significantly more tolerable than false negatives. I will argue later on that another type of cue that elicits disgust is cheating, and in this domain there is no incentive to tolerate false positives for the sake of minimizing false negatives. In general, over-sensitivity to cheaters is no more advantageous than under-sensitivity to cheaters. To be highly risk-averse to the possibility of being cheated is to forgo many rewarding opportunities for cooperation (see, e.g., Axelrod 1984 on the advantages of "forgiving tit-for-tat" over "tit-for-tat"). Even if it makes sense for pathogen disgust to play it safe rather than sorry, then, this is not true of moral disgust.

Kelly's evolutionary argument does not challenge the reliability of moral disgust, I have argued, but recent experimental work might seem to provide independent evidence for its unreliability. Researchers induce disgust in participants by exposing them to a foul odor, a messy desk, a revolting scene from a film (Schnall et al. 2008), or by subjecting them to hypnosis (Wheatley and Haidt 2005). Disgust is then found to amplify negative moral evaluations (though it's not clear that these findings are robust, nor that they replicate; see also May 2014 and Landy and Goodwin in press for criticism). Because in each case disgust is elicited by something that is incidental to the object of evaluation, its effect on moral judgment is clearly improper. Thus, it may seem as if disgust distorts moral thought.

However, this experimental evidence offers only a narrow sampling of disgust's effect on moral judgment, a sampling that is deliberately selected for its ability to bias moral judgment. From this narrow sample, then, no general conclusions follow. Furthermore, too, disgust is more reliable in other contexts. When disgust is integral to the object of evaluation rather than incidental, it seems able to appropriately guide moral evaluation. For example, in one recent study participants experiencing disgust toward violent crimes recommended punishments that conform more closely to the Model Penal Code (Capestany and Harris 2014). In any case, no general claims about the reliability of disgust follow from its unreliability in certain limited contexts. To be clear, the conclusion to which we are now led is not that moral disgust is reliable, but rather that we have no reason to believe that it is generally unreliable.

Philosophers who are skeptical of disgust are right to look to its reliability, i.e., its tendency to track either morally relevant or morally irrelevant bases for moral judgment. Feelings of disgust are warranted only if they are reliably sensitive to cues that genuinely merit moral disapproval. However, empirical work does not support any sweeping epistemological generalizations about disgust. Like other emotions, disgust is neither generally reliable nor generally unreliable. (A formula for more selective empirical debunking arguments is found in Kumar and Campbell 2012.)

In general, the epistemic merits of disgust—as with any other emotion—depend on one's cultural background, socialization, and other features of one's learning environment. These factors can attune one's disgust sensitivity or they can distort it. For example, it is an achievement of 20<sup>th</sup> and 21<sup>st</sup> century feminism that many people increasingly feel disgust toward creepy, sexist men who see young women as objects and sex as a competitive game. This is attunement of disgust, rather than distortion. In general, and as philosophers are now increasingly suggesting, empirical work offers lessons about the rational attunement of moral emotions (see Campbell and Kumar 2012; Kumar and Campbell forthcoming; Railton 2014).

Sometimes empirical information about disgust does have the potential to debunk moral attitudes. The source of one's disgust on particular occasions may reveal a link to implicit norms and values that, for good reasons, one explicitly rejects. Many ingroup norms are not reflectively endorsable, for example. Nonetheless, what we know about its evolutionary history and its susceptibility to experimental manipulation does not show that disgust is generally unreliable.

### 5. Harm

If moral disgust could not be attuned to cues that warrant revulsion, then critics like Kelly would be right to conclude that it should not be accorded a voice in morality. I have argued that these critics are wrong. However, another class of skeptical worries about disgust looks downstream rather than upstream. Martha Nussbaum (2004) is a leading critic of moral disgust and, like Kelly, she too argues against the emotion on empirical grounds. Joining other critics, Nussbaum argues that disgust has morally harmful consequences. As I will show, however, even though Nussbaum's worries are well founded, they do not justify sweeping skepticism. The downstream effects of disgust suggest that the emotion is harmful in some ways, but this seems to be true of all negatively valenced moral emotions. After discussing the harmful aspects of disgust, we'll examine in subsequent sections the ways in which the emotion is beneficial and, furthermore, how it can fit some of its objects.

Nussbaum argues that in social life disgust has effects on thought and behavior that harm others. Disgust toward disadvantaged and marginalized outgroups fosters prejudice, leads to degradation, and even facilitates genocide. Nazi propaganda, for example, often cast Jews as "parasites," "vermin," and "filthy rats." The idea that Jews are disgusting likely helped make possible their horrifying treatment in ghettos and concentration camps (see Levi 1989; Goldhagen 2009; cf. Tirrell 2012).

As Nussbaum says, disgust "has throughout history been used as a powerful weapon in social efforts to exclude certain groups and persons" (2004: 107). Jews are a

common target, but so are women, blacks, gays, transgender individuals, the disabled, the elderly, and members of lower classes and castes. Disgust encourages social exclusion, subordination, and worse because it leads people to treat others as things to be avoided, excluded, and eliminated.

The harmful effects of disgust are troubling, but they do not support wholesale rejection of the emotion. First of all, many other emotions also have bad consequences. Anger, for example, is more likely than disgust to lead to violence and injustice. Many cases of genocide stem not from disgust toward a marginalized group but from anger. Completing a cycle of revenge, the Rwandan genocide was motivated primarily by anger among Hutus toward Tutsis, although disgust was likely at play too. Few would suggest that resentment, indignation, outrage, and other forms of moral anger should therefore be abandoned. Any such suggestion would anyway be idle (cf. Strawson 1962).

Perhaps more troubling than discrimination and violence, with which anger likely has a stronger connection, is an apparent tie between disgust and "depersonalization." Evidence suggests that to the extent that one feels disgust toward someone, one categorizes him as a mere "thing" rather than a person. When people are disgusted by a person or a group they exhibit less activity in areas of the brain associated with social cognition (Harris and Fiske 2007). Thus, disgust may inhibit the tendency to ascribe mental states to others (Sherman and Haidt 2011). Compare again disgust with anger. When you are angry at someone you see her as a person to be confronted, even attacked, but not as a piece of trash to be thrown away. If we perceive someone as disgusting, it seems, we begin not to see her as a person. Disgust therefore seems to violate the egalitarian principle that enjoins respect for all persons (see Anderson 1999). And so, it would seem, the link between disgust and depersonalization seems to provide a strong reason to distrust the emotion.

An empirical link between disgust and depersonalization is certainly worrying. The empirical evidence, however, is correlational and does not show that disgust causes depersonalization, rather than vice versa. The possibility remains that when one person depersonalizes another, that increases her tendency to feel disgust toward him. In that case, disgust is caused by harmful attitudes, rather than causing them. Moreover, though, depersonalization is not necessarily worse than other forms of mistreatment. If I make you angry and you violently attack me in response, that you still think of me as a person is meager consolation. Thus, if this argument gives us reason to throw out moral disgust, similar considerations would give us reason to throw out moral anger. At most, rather, feelings of disgust should give us pause and should be countered with attitudes that accord persons respect due to them.

There is another reason that the link between disgust and depersonalization is not as damning as it may seem. Moral disgust can take either actions or persons as objects,

and it is less likely to depersonalize when its objects are actions. Compare disgust with contempt. To perceive someone as contemptible is to see him or his character as beneath oneself, and thus undeserving of respect. It is controversial whether contempt is ever an apt moral response, but as Macalester Bell (2013) argues in her defense of the emotion, contempt is always person-oriented. Disgust, however, may be either person-oriented or act-oriented. Sometime a person is disgusting and sometimes it is specifically his behavior that is disgusting. Depersonalization is less likely when disgust takes actions as objects, and thus act-oriented moral disgust is less problematic than person-oriented moral disgust.

I do not pretend to have swept away all critical concerns about the harmful effects of disgust. Nor do I aspire to. In general, moral emotions have both strengths and weaknesses, and disgust is no exception. Even quite valuable moral emotions like empathy have clear shortcomings (Prinz 2011; Bloom 2013; cf. Kumar 2015-b). Disgust has unfortunate connections to prejudice, violence, and depersonalization. But these do not present special problems for disgust. Anger more often leads to prejudice and violence. And contempt is more liable to generate depersonalization than disgust, since it always takes persons as objects. Worries about the harmful effects of disgust do not, then, justify skepticism, not without threatening to cast out from morality all negative emotions.

I began the essay by offering an empirical picture of disgust and its recruitment in morality. In this section and the last I argued that disgust is not uniformly unreliable, nor uniquely harmful, and therefore that we should not be skeptical about disgust's place in morality, especially not in comparison with other emotions. In the rest of the essay I want to explain, more positively, under what conditions disgust is a fitting moral response. As I have suggested, pathogen disgust is fitting when its objects are sources of disease and infection that have the potential to pollute and circulate. Disgust motivates avoidance and exclusion, expressively communicates information about sources of disease and infection, and tracks the spread of microorganisms. Similarly, some moral wrongs merit disgust because the emotion accurately reflects the nature of these wrongs. That is, some moral wrongs are polluting, require collective response, and can spread easily through a population. Because disgust accurately reflects these wrongs, I will argue, it is a fitting moral response when it takes them as objects.

# 6. Reciprocity

Empirical work suggests that moral disgust is elicited by violations of ingroup norms and purity values. Disgust toward outgroup members is troubling because it has the potential to dehumanize and harm people that are already marginalized and oppressed. However, disgust is also guided by other norms and values. Drawing on the rich body

of existing empirical work on disgust, I will argue in what follows that the emotion has acquired a sensitivity to actions and character traits that are genuinely objectionable. In particular, I will show that moral disgust accurately reflects these wrongs and vices.

Let's begin by looking more closely at some of the most relevant empirical evidence. When participants are asked to recall an event that disgusted them, they are surprisingly more likely to mention cheating or dishonesty than food or filth (Rozin et al. 1999a; cf. Nabi 2002). Across several studies, participants recalled events associated with hypocrisy, betrayal, and disloyalty (Rozin et al. 1999a; see also Simpson et al. 2006); being treated unfairly, cheated, and lied to (Nabi 2002); theft, fraud, exploitation, lying, and cutting in line (Tybur et al. 2009). In other research participants affirmed that they felt disgust after reading about people embezzling money from a bank, defrauding an insurance company, stealing from the blind (Hutcherson and Gross 2011), and taking advantage of an innocent person (Gutierrez et al. 2012). Taken together, we find here a broad range of moral violations, but they can be consolidated under three general categories: *cheating* (being treated unfairly, line-cutting); *dishonesty* (hypocrisy, betrayal, disloyalty, lying); and *exploitation* (fraud, embezzlement, taking advantage).

Other measures of disgust that do not rely on self-report reinforce these generalizations. Certain sorts of unfairness elicit facial muscle activity that underlie disgust's gape face (Cannon et al. 2011). The sorts of unfairness that provoke disgust seem to involve cheating. Take the ultimatum game, in which one person is given a sum of money and instructed to offer some portion of it to another. The other person can either accept the offer or reject it; if she rejects it neither person receives any money. Considering only financial gain, it is rational to accept any offer, no matter how small, since some portion of the total is better than none at all. However, researchers find that participants often reject lowball offers (e.g., Güth et al. 1982), seemingly because they expect that an even distribution is fair and therefore perceive that they have been cheated. Further evidence suggests that disgust is among the emotions that underpins this behavior. Participants who receive lowball offers in the ultimatum game make the gape face, select the gape face as the expression that befits their experience (Chapman et al. 2009), and exhibit increased activity in the insula (Sanfey et al. 2003).

So, empirical evidence suggests that cheating, dishonesty, and exploitation often elicit disgust (though they also elicit anger, to a lesser degree). For the sake of having a label, let's call this class of moral wrongs "reciprocity violations." Other sorts of moral wrongs are not generally disgusting. Malicious harm does not generally elicit disgust (Hutcherson and Gross 2011), nor does theft, direct attacks on one's autonomy, or violations of special obligations (except perhaps when they happen to involve behavior that is independently disgusting). Rather, they tend to elicit one or another type of moral anger—resentment, indignation, outrage. Disgust therefore tends to be implicated in reci-

procity violations, but not in violations of norms related to harm, theft, autonomy, or special obligations.

This pattern is not just an accident: behind it lies a powerful rationale that is grounded in disgust's causal role. Disgust motivates avoidance and exclusion, while anger motivates blame and confrontation. And it often makes sense to avoid and exclude people who commit reciprocity violations, whereas it often makes sense to blame and confront people who intentionally cause harm, commit theft, infringe autonomy, or violate special obligations. The reason, as I will now explain in detail, is that reciprocity violations are different from other sorts of moral wrongs in that they have the potential to pollute and circulate. Those who commit reciprocity violations exploit benign social interactions where there is an expectation of trust and reciprocity, spoiling these interactions, and their behavior often leads others to do so as well.

Among moral philosophers and other social theorists, punishment is often associated implicitly or explicitly with anger. Anger motivates blame, confrontation, and threats, and thus functions to halt and discourage immoral behavior. But disgust motivates a personally less risky form of punishment that is often neglected: social exclusion. Moral disgust motivates us to physically withdraw from, socially exclude, and ostracize the offending party. This protects agents from offenders. Furthermore, offenders are consequently excluded from reaping the benefits of social contact. Social exclusion is often an apt form of punishment for those who cheat, act dishonestly, or exploit others, since these people threaten moral pollution of constructive and beneficial social interaction, and thus subvert cooperation.

Imagine that you find out someone in your social circle is an enormous hypocrite. He has been urging you not to do something that he has been doing himself behind your back. An appropriate response in cases like this is often to sever the interpersonal relationship by creating physical and social distance—to avoid him, to longer respond to appeals to engage with him, and to encourage other people to behave similarly. Disgust motivates precisely this form of punishment and it is commonly elicited by acts of hypocrisy.

Anger motivates blame and confrontation. This is an appropriate response to certain moral violations. If someone harms you or steals your property, often it won't be appropriate to withdraw from him. He may continue to be a threat that can be mitigated only through blame and confrontation. Or if a loved one breaches your trust, to distance yourself from her will be to no purpose if the relationship is to continue. (Indeed, disgust seems to predict divorce rates—see Gottman 1994). Rather it will be more appropriate to feel anger, express that anger, and then take steps to repair the relationship. Anger is appropriate as a response to harm and violations of special obligations, but it isn't

similarly appropriate as a response to immoral agents who commit reciprocity violations and are best avoided and excluded.

Fear, like disgust and unlike anger, motivates withdrawal rather than approach. The motivational difference between disgust and fear lies in the more fine-grained nature of their action tendencies. Fear motivates flight, whereas disgust motivates avoidance and exclusion. Sometimes, moral fear—or "horror"—may be an appropriate response to an extreme and dangerous moral violation from which one must immediately escape or shield oneself. But the appropriate response to cheaters, deceivers, and exploiters is not to flee, often, but simply to avoid and exclude them. The reason is that their actions tend to pollute and spoil otherwise benign or positive social interaction. They merit avoidance and exclusion.

Disgust accurately reflects the polluting nature of reciprocity failures, motivating an appropriate form of punishment against those who commit such failures, and this vindicates its conscription in morality. But remember that disgust has other downstream effects, on expression and cognition, and, as we'll see now, these effects also help explain why moral disgust is a fitting response to reciprocity violations.

Recognition of disgust is empathic. That is, noticing that another person is disgusted often involves experiencing disgust. The empathic nature of disgust recognition facilitates the automatic transmission of information about local vectors of disease and infection. In morality, though, this aspect of disgust serves to coordinate collective action. Avoidance and exclusion can be potent forms of punishment, but they are more effective when they are socially implemented. If someone who cheats, deceives, or exploits inspires disgust only in her victims, then she may continue to cheat, deceive, or exploit others. But since disgust spreads empathically, the joint efforts of a social group can more effectively deny her the benefits of social contact. Disgust is, then, a fitting response to reciprocity violations in part because the empathic nature of disgust recognition facilitates collective punishment, and collective punishment is an appropriate response to reciprocity violations that pollute social interaction.

Let's turn now to the sense of contamination that disgust imparts. When something is disgusting, other things associated with it also become disgusting. This makes sense when the elicitor has the potential to spread disease. But is it fitting to have a sense of contamination toward cheating or dishonesty? Often it is. The reason is that unreciprocal behavior tends to spread in a population in way that harmful behavior does not. Although people are motivated intrinsically to avoid harm, to a greater degree they tend to follow norms against cheating and dishonesty only conditionally (Bicchieri 2006). That is, they follow these norms only so long as others follow them. Once some people begin to cheat or act dishonestly others often will too. And so, it seems, some failures of reciprocity do genuinely have a contamination potency. Alexandra Plakias (2013) argues

similarly that some moral violations spread, and that disgust tracks this spread, but she doesn't notice that this is more typical of some moral violations than others.

To see the point more concretely, consider an empirically well studied example. In a public goods game, people contribute money to a pot that is then multiplied and redistributed to everyone. It is in everyone's best interests, collectively, for each person to contribute all of her money. However, people can defect by not contributing their fair share and still reap interest that accrues to the common pot. Studies indicate that once some participants begin to hoard their money, defection rapidly spreads across the pool of participants (Isaac et al. 1988; Fischbacher et al. 2001). Disgust operates on the assumption that failures of reciprocity spread to others, and this assumption seems to fit its object. That is, disgust toward people who associate with one another tracks the way in which reciprocity violations circulate and propagate. (For another empirical illustration involving cheating see Gino et al. 2009).

I began this essay by identifying the basic function of disgust and how it is that disgust executes this function. It has emerged that disgust also has moral functions. Originally, as many authors suggest, the function of moral disgust was to detect and punish violations of ingroup norms. But disgust has since become attuned to other moral wrongs: cheating, dishonesty, and exploitation. Moral disgust is a fitting response to these failures of reciprocity for precisely the same reason that pathogen disgust is: it accurately reflects the nature of these moral wrongs. Disgust motivates social exclusion, coordinates collective action, and tracks the spread of immorality—all of which contributes to the punishment and containment of agents who commit reciprocity violations that pollute and contaminate, by individually and collectively depriving these agents of social contact.

## 7. Politics & Objections

We have already examined several ways in which disgust is repurposed in morality, but we have not yet achieved a thorough account of moral disgust and the conditions under which it is appropriate. Disgust has crept into yet other parts of moral life—beyond the domains of ingroup, purity, and reciprocity. In some cases, disgust supports important norms and values. The main focus of this section will be on disgust's emerging recruitment in political life, but I will also discuss lingering objections.

Disgust is implicated in politics, and not just when political actors engage in activities that are independently disgusting. Among the most vivid elicitors of moral disgust are cruel, corrupt, and otherwise objectionable politicians. An underlying rationale seems to be at work here, and it is rooted in the fact that politicians gain and keep their power and authority through the attention and support of the public. Disgust motivates

withdrawal and exclusion, and thus has the potential to effectively divest authority from politicians. Once again, disgust motivates an appropriate response to moral wrongs, and this is why it makes sense to feel disgust toward objectionable politicians.

Recall once again the empathic nature of disgust recognition. Recognizing disgust in another person often involves experiencing disgust oneself. Anger recognition is not empathic in the same way. Typically when one notices that another person is angry one does not automatically feel anger. This difference between disgust and anger helps explain why disgust is an important tool in political contexts, lending itself to tasks for which anger is unsuited. Communicating that something is morally wrong and persuading others to feel similarly is more effective if it is mediated by disgust rather than anger. Disgust therefore coordinates political movements, and this is another reason that it fits smoothly within political thought and action.

Disgust is operative in more local political contexts too. One type of case has recently become salient in academia and it involves members of the academic community that sexually exploit people in subordinate positions of power. Disgust comes into play in part because its objects are exploitative. Furthermore, however, participation in the relevant academic community is often an important value for the offender. Disgust motivates punishment in the form of social exclusion and thus imposes a potent cost on sexual predators and harassers. Disgust also empathically spreads to others, and thus once again helps to coordinate collective action. Here too, it seems, the causal role of disgust supports an appropriate response, by helping to protect a community from predators and harassers.

As we've observed over the course of the essay, disgust plays both positive and negative roles in morality. This is true of disgust's role in politics as well. For example, disgust can ignite witch hunts. Furthermore, some people are disgusted not just by politicians but also by the political system itself. Withdrawal from the political system is unlikely to be similarly appropriate. Governments, of course, continue to exercise power over people even after they disengage from political participation.

Or consider the performative aspect of disgust. Disgust is not always an automatic, involuntary response. When we are around people who we expect to share our moral and political values we sometimes "perform" the gape face to signal our shared commitment to these values, although typically we are not aware of the intentional character of our action (cf. Butler 1990; Hacking 1998). Performative disgust can help to reinforce, to ourselves and others, our social identity. But it also feeds political polarization. We are disgusted by their politics, they are disgusted by ours. Thus, different groups avoid and exclude one another, refuse to engage in dialogue or attempt mutual understanding, and social problems about which they disagree continue to frustrate everyone. Conse-

quently, we have reasons to be careful about feeling and performing disgust when doing so increases political polarization.

I have been drawing comparisons between disgust and anger throughout the essay, and this comparison highlights another potential worry about moral disgust. Moral anger has been the object of greater philosophical attention among philosophers interested in moral responsibility, and the social dynamics of anger are reasonably well understood. You harm me or someone else; I feel and express resentment or indignation; if you recognize your culpability you then feel guilt, show contrition, and apologize; if you communicate sincerity my resentment is abated. Normal social relations are restored, so far as possible.

But what are the social dynamics of disgust? If my disgust toward you is person-oriented, and if you agree that you are at fault, you are likely to feel shame. As is widely believed, to feel guilt is to feel bad about what you have done, whereas to feel shame is to feel bad about who you are. Shame then motivates changing not your behavior, but your character. However, it also motivates you to hide and to shield yourself from odium, which is not especially constructive. When my disgust is act-oriented, however, what are you likely to feel? Shame or guilt? Is shame a good motivator to change yourself or your character? Are guilt, apology, and contrition likely to abate disgust? Perhaps someone who recognizes herself to be a fitting object of disgust is motivated to "cleanse" herself, by reforming her behavior. Is this likely to abate disgust?

Insufficient empirical and philosophical attention has been paid to these questions. The need is especially pressing in light of the possibility that disgust is not easily abated. As far as pathogen disgust is concerned, it seems to take a great deal of purification to remove the taint of disease or infection. In morality too, it may be that a person who is once disgusting is persistently disgusting. If so, then disgust is less likely to contribute positively to social dynamics that restore normal social relations. On the other hand, perhaps self-cleansing can abate disgust. We do not yet know enough to make an informed assessment here. Disgust is too flexible to support simple inferences from the character of pathogen disgust to the character of moral disgust. Once again, empirical data would be valuable and potentially normatively significant—in this case about the recalcitrance of disgust and what sorts of responses are likely to abate it. What we learn about these issues is unlikely to vindicate or repudiate disgust entirely, but it can enrich our understanding of its value, and enable us to understand to what extent and under what contexts it is a fitting type of moral disapprobation.

Many philosophers are skeptical of moral disgust, perhaps because they assume that it is tied exclusively to conservative norms and values. I have shown, to the contrary, that disgust is implicated in aspects of moral thought that are shared by liberals and conservatives. Moreover, disgust is repurposed in ways that support important moral norms and values, by motivating an important form of punishment, tracking the spread of moral violations, and expressively coordinating collective action. Disgust accurately reflects the nature of certain wrongs that commonly elicit moral revulsion. Instead of ridding ourselves of disgust, then, we would do better to understand its fittingness and unfittingness, its uses and its hazards, and thereby arrive at a richer appreciation of its suitability for moral life.

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