CHAPTER 8

A Component Process Model of Disgust, Anger, and Moral Judgment

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What is the role of disgust in morality?

The component process model of morality proposed in this chapter suggests that moral disgust is driven primarily by negative character evaluations, explaining why both purity and nonpurity transgressions trigger disgust and why purity transgressions are morally condemned.

The emotion of disgust has played an outsized role in moral psychology over the past 15 years. As described below, research on moral disgust has informed such key debates as whether moral judgment is rational or intuitive; whether morality consists of one process or many; and whether morality is culturally uniform or variable. What, then, is the role of disgust in morality? As noted by Tybur and colleagues (Tybur, Lieberman, Kurzban, & DeScioli, 2012), it is critical to break this question into smaller pieces to avoid confusion.

1. *What kinds of immoral things are disgusting?* One perspective is that only disgusting immoral things can evoke disgust (Horberg, Oveis, Keltner, & Cohen, 2009; Rozin, Lowery, Imada, & Haidt, 1999; Russell & Giner-Sorolla, 2013). "Disgusting immoral things" are often referred to as "purity" or "divinity" transgressions, meaning acts that violate sexual or bodily norms (Graham, Haidt, & Nosek, 2009; Rozin et al., 1999). Purity transgressions raise a number of important questions, which I return to shortly. However, for the current question—what kinds of immoral things are disgusting—they are not very interesting: It is hardly surprising that purity transgressions evoke disgust, given that they involve prototypical disgust elicitors such as body products and biologically disadvantageous sex.

More interesting, and more controversial, is the question of whether immoral things that are *not* intrinsically disgusting, such as harm, unfairness, and disloyalty, can evoke disgust. People certainly report disgust toward nonpurity transgressions, but there has been debate about whether this disgust is synonymous with anger (Cameron, Lindquist, & Gray, 2015; Chapman

& Anderson, 2013; Royzman, Atanasov, Landy, Parks, & Gepty, 2014; Rozin, Haidt, & Fincher, 2009; Russell & Giner-Sorolla, 2013). This issue is fraught with methodological pitfalls, and the evidence is evolving very rapidly, but at present there is reason to think that nonpurity transgressions can indeed evoke disgust that is meaningfully distinct from anger (see the discussion of evidence later in the chapter). Thus, to answer the first question, *both purity and nonpurity transgressions can be disgusting.*

2. *Why are nonpurity transgressions disgusting?* Contemporary theories of disgust propose that disgust's original function was to facilitate disease avoidance (Oaten, Stevenson, & Case, 2009; Tybur et al., 2012). It is therefore not clear why nonpurity transgressions, which do not involve disease vectors, can evoke disgust. The explanation may lie in the opposing behavioral tendencies associated with disgust and anger. In particular, whereas anger is linked to approach motivation and may be aimed at changing the target's future behavior (Carver & Harmon-Jones, 2009; Fischer & Roseman, 2007), disgust is associated with withdrawal and avoidance (Rozin, Haidt, & McCauley, 1999). Therefore, *disgust in response to nonpurity transgressions may subserve withdrawal motivation in the moral domain* (Chapman & Anderson, 2013; Hutcherson & Gross, 2011). Withdrawal/avoidance might be useful under a number of different circumstances. Most prominently, it may be futile to try to influence a transgressor's future behavior when his or her actions stem from bad character (Fischer & Roseman, 2007). Thus *nonpurity transgressions that stem from or signal bad character may be especially likely to elicit disgust* (Giner-Sorolla & Chapman, 2017; Hutcherson & Gross, 2011).

3. *Why are purity transgressions immoral?* In other words, why is it wrong to do something disgusting, if doing so does not violate any other moral rules? One explanation, derived from the social intuitionist model (Haidt, 2001), is that the strong feelings of disgust evoked by purity transgression directly cause negative moral judgments. However, a recent meta-analysis suggests that incidental disgust has at best a weak effect on moral judgments (Landy & Goodwin, 2015). Thus it is unlikely that the disgust associated with purity transgressions is sufficient to cause moral condemnation.

Another explanation is that purity concerns may constitute a distinct moral module: that is, for some people, it may be intrinsically wrong to do something disgusting, perhaps because doing so contaminates the purity or sanctity of the soul (Graham et al., 2009; Rozin, Lowery, et al., 1999). This may explain wrongness judgments for some purity transgressions. However, the vignettes used as stimuli in moral judgment studies are heterogeneous and psychologically complex, which admits the possibility of alternative explanations. For example, people may perceive that some purity transgressions have harmful consequences even when the scenarios are constructed so as to be free from explicit harm (Gray, Schein, & Ward, 2014; Royzman, Leeman, & Baron, 2009). Perhaps more importantly, *doing something disgusting (i.e. committing a purity transgression) may be an especially strong signal that the transgressor has bad character* (Uhlmann & Zhu, 2013; Uhlmann, Pizarro, & Diermeier, 2015). Here, moral judgments may reflect condemnation of the transgressor as a person as much as condemnation of the person's acts.

4. *Are there other differences between purity and nonpurity transgressions?* Researchers have suggested that moral judgments about purity and nonpurity transgressions may rely on different cognitive processes. For example, two studies have found that the transgressor's malignant versus innocent intent matters less for condemnation of purity transgressions compared with nonpurity transgressions (Chakroff, Dungan, & Young, 2013; Young & Saxe, 2011). Such findings have been taken as evidence for distinct moral modules for purity and nonpurity transgressions (Chakroff & Young, 2015). However, close examination of the data reveals that evidence is actually mixed (see the later section on evidence). Moreover, the complexity and heterogeneity of moral transgression stimuli once again opens up the possibility of alternative explanations. *Many differences could arise*

because purity transgressions may primarily activate—and could even derive their wrongness from—character judgments rather than consequence judgments (Uhlmann et al., 2015; Uhlmann & Zhu, 2013). That said, this idea cannot account for all of the reported differences between purity and nonpurity transgressions, suggesting that purity-related moral cognition may be at least partially distinct from non-purity-related moral cognition.

Figure 8.1 summarizes this perspective on moral judgment and emotion, which I call the component process model (CPM).[1] According to the CPM, a number of component cognitive processes contribute to disgust, anger, and moral judgments. For harmless purity transgressions (e.g. consensual incest), disgust can stem from core disgust evaluations triggered by stimuli such as biologically disadvantageous sex or contact with contaminants. Purity transgressions also trigger disgust by activating negative character evaluations ("only a messed-up person would do something like that"). Nonpurity transgressions (e.g., unprovoked violence) can trigger negative character judgments as well, which similarly lead to disgust. In turn, disgust motivates avoidance-related responses. Negative character judgments also contribute to moral condemnation, which explains why harmless purity transgressions are condemned. For nonpurity transgressions, perception of negative consequences triggers moral condemnation and anger in parallel; anger then motivates approach-related responses. Not shown in Figure 8.1 is the idea that purity transgressions that are perceived to have negative consequences will also trigger anger and approach-related behaviors. Many cognitive differences between purity and nonpurity transgressions could arise because harmless purity transgressions activate character judgments to a greater extent than consequence judgments, whereas harmful nonpurity transgressions typically activate both consequence judgments and character judgments. Some differences cannot be easily accounted for in this way, however; thus the CPM allows for purity-specific and non-purity-specific moral evaluations to influence judgments.

Historical Context

Research on disgust has informed a number of the broader debates in moral psychology. These include whether there are one or two or many moral processes; whether morality is primarily intuitive or rational; and whether morality is culturally uniform or varied.

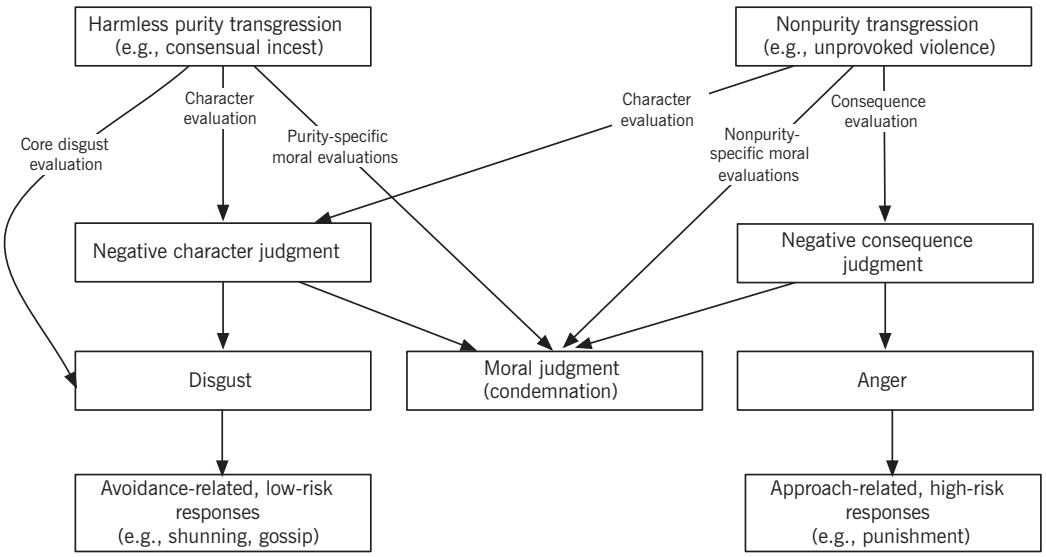

FIGURE 8.1. The component process model (CPM) of moral judgment and emotion.

- *"One or two or many processes?," informed by "What kinds of immoral things are disgusting?"; "Why are disgusting things immoral?"; and "Are there other differences between purity and nonpurity transgressions?"* One of the earliest multiprocess models of moral judgment in the field of psychology is the CAD triad hypothesis (Rozin, Lowery, et al., 1999). The CAD hypothesis takes as its starting point the three moral processes described by anthropologist Richard Shweder, namely, community, autonomy, and divinity (Shweder, Much, Mahaprata, & Park, 1997). According to the CAD hypothesis, these codes are linked to the emotions of contempt, anger, and disgust, respectively. The CAD hypothesis was a precursor to moral foundations theory, which reduces the emphasis on distinct emotions but retains the idea that divinity (a.k.a. purity) is a distinct moral process (Graham et al., 2009). Other work has also developed the idea that purity violations, and the disgust associated with them, represent a distinct moral process (Chakroff & Young, 2015; Russell & Giner-Sorolla, 2013). In sum, one historical trend has been to take evidence for a selective relationship between particular emotions (especially disgust) and particular types of transgressions (especially purity) as evidence for multiple moral processes.

  Recently, the opposite approach has emerged: If purity transgressions and nonpurity transgressions evoke similar emotions (e.g., if both can evoke disgust), then this may provide evidence against the idea of multiple moral processes and in favor of single-process models such as the dyadic model (Cameron et al., 2015; Gray, Waytz, & Young, 2012). According to the dyadic model, moral judgment depends primarily on the evaluation of negative consequences, which leads to an undifferentiated negative emotional response. The dyadic model thus explains the wrongness of seemingly harmless purity transgressions by suggesting that they are implicitly perceived as having negative consequences, that is, as being harmful (Gray et al., 2014).

  The alternative suggested by the CPM is that moral judgment relies on a number of component cognitive processes that may be activated to different degrees by different types of transgressions. Thus the CPM is a multiprocess model. According to the CPM, both character evaluations and consequence evaluations contribute to moral judgment; other processes may also contribute, but they are not considered here. Both purity and nonpurity transgressions can trigger character evaluations, which explains why both types of transgressions can evoke disgust. Purity transgressions may often activate character judgments to a greater extent than consequence judgments, perhaps because most purity transgressions do not have obvious negative consequences (Uhlmann & Zhu, 2013). In a strong version of the CPM, there are no qualitative differences in the processes that contribute to judgments about purity and nonpurity transgressions; all of the apparent cognitive differences between these transgression types can be accounted for by quantitative differences in the degree to which character and consequence judgments are activated. However, a weaker version of the theory (shown in Figure 8.1) allows cognitive processes that are unique to purity and nonpurity transgressions. Note that the weaker version of the CPM still maintains that both types of transgressions can activate character and consequence judgments.

- *"Intuitive versus deliberative," informed by "Why are disgusting things immoral?"* The original description of the social intuitionist model (SIM; Haidt, 2001) opens with a vignette that depicts consensual incest. Consensual incest is often morally condemned, even though there appears to be no harm. If there is no harm, then where does the wrongness judgment come from? The answer, according to the SIM, is the powerful feelings of disgust evoked by incest. Thus the fact that disgusting things are sometimes immoral has been taken as evidence that emotion is what causes moral judgment. Experimental work showing that incidental disgust can increase condemnation of moral transgressions has also been taken as support for the idea that emotion causes moral judgment (Eskine, Kacinik, & Prinz, 2011; Schnall, Haidt, Clore, & Jordan, 2008; Wheatley & Haidt, 2005). However, a recent meta-analysis of disgust induction studies suggests that incidental disgust has at best a small effect on moral judgment

(Landy & Goodwin, 2015). In contrast to the SIM, the CPM puts character evaluation upstream of disgust. Such evaluations could be either implicit or explicit; thus the CPM is ambivalent as to the intuitive-versus-deliberative nature of morality.

- *"Culturally uniform or variable?," informed by "Why are disgusting things immoral?"* Some cultures judge that purity transgressions are immoral, whereas others do not. For example, American conservatives condemn purity transgressions much more than American liberals (Graham et al., 2009). According to moral foundations theory, disgusting things are immoral to such people because these individuals have a distinct moral process for purity; this process is absent in individuals who do not condemn disgusting things (Graham et al., 2009; Graham et al., 2011). In other words, differences of opinion about purity transgressions provide evidence that morality is culturally variable. By contrast, the CPM draws on social domain theory (Turiel, Killen, & Helwig, 1987) to suggest an alternative explanation for cultural variability in condemnation of purity transgressions. Specifically, different cultures may make different informational assumptions about purity transgressions (Turiel, Hildebrandt, Wainryb, & Saltzstein, 1991). For example, to the extent that a particular culture assumes that a disgusting act is harmful (to the self, others, the community, or the natural order), it will be moralized by that culture. Similarly, to the extent that a particular culture assumes that a disgusting act indicates bad character, it will be moralized. American liberals, for example, believe that homosexual sex is neither harmful nor indicative of bad character; therefore, American liberals do not moralize homosexuality. The CPM thus accounts for cultural variability in moralization of purity transgressions by pointing to variability in the component processes of character and consequence evaluation.

Theoretical Stance

The CPM differs substantially from some major theories of morality. First, according to the CPM, both purity and nonpurity transgressions can evoke disgust. Thus the CPM differs from theories in which disgust is linked uniquely to purity transgressions, such as the CAD triad hypothesis (Rozin, Lowery, et al., 1999), work by Young and colleagues (Chakroff & Young, 2015; Young & Saxe, 2011), and older work by Giner-Sorolla, Russell, and their colleagues (Russell & Giner-Sorolla, 2013). The strong version of the CPM also diverges from modular theories such as moral foundations theory (Graham et al., 2009) insofar as it denies that the cognitive processes associated with purity transgressions are fully distinct from those underlying nonpurity transgressions. (The weak version of the CPM does allow for distinct, in addition to common, processes). Finally, the CPM differs from SIM (Haidt, 2001) in that it places evaluations of character and consequences upstream of moral judgment and emotion.

By contrast, the CPM is very much allied with and indebted to a number of other theories. Specifically, the CPM attempts to combine elements of several existing theories in a novel way so as to produce a unified account of the moral judgments and emotions elicited by purity and nonpurity transgressions. The CPM borrows from person-centric models of morality (Uhlmann et al., 2015) the idea that character evaluations are critical to moral judgment, and that they can at least partly explain why harmless purity transgressions are judged as wrong. The person-centric model does not specifically address emotions, however, whereas the CPM does. The idea that moral disgust might be related to character judgments has its origins in the work of Giner-Sorolla and colleagues (Giner-Sorolla & Chapman, 2017), and in Hutcherson and colleagues' social–functionalist model (Hutcherson & Gross, 2011). Hutcherson and colleagues were also among the first to suggest that moral disgust might be associated with withdrawal motivation. However, Hutcherson and colleagues were primarily interested in disgust evoked by nonpurity transgressions and did not address the link between purity transgressions and character evaluations that the CPM includes.

Finally, the CPM has a mixed relationship with some other theories. The CPM agrees with the dyadic model of morality

(Gray et al., 2012) as to the importance of consequence (a.k.a. harm) judgments for moral condemnation. However, the CPM also emphasizes the role of character and suggests that character judgment as well as harm judgments may contribute to condemnation of purity transgressions. The dyadic model is, more broadly, an example of a constructivist model of morality (Cameron et al., 2015), with which the CPM shares the general idea that moral cognition consists of several different cognitive processes that can be combined in different ways. However, constructivist models tend to favor an undifferentiated negative emotional response to transgressions, whereas the CPM proposes that different component cognitive processes trigger different emotions. Finally, constructivist models typically favor cultural–cognitive explanations for emotion differentiation, in which distinct emotions such as anger and fear arise from an individual's culturally driven conceptualization of what is fundamentally an undifferentiated affective experience (Barrett, 2006). By contrast, the CPM is more inspired by biological–evolutionary reasoning, in which distinct emotions represent unique adaptations to particular kinds of opportunities and threats in the ancestral environment (Cosmides & Tooby, 2000; Ekman, 1992; Frijda, 1987).

Evidence

The CPM's first claim is that both purity and nonpurity transgressions can evoke disgust that is distinct from anger. This is a methodologically treacherous area, because disgust and anger evoked by moral transgressions share considerable variance (Chapman & Anderson, 2013; Russell & Giner-Sorolla, 2013). However, a small body of evidence does support the idea that moral disgust evoked by nonpurity transgressions is distinct from anger. First, endorsement of disgust words (e.g., *repulsed, sickened*) in response to nonpurity transgressions is predicted by endorsement of facial expressions of disgust but not facial expressions of anger (Gutierrez, Giner-Sorolla, & Vasiljevic, 2011). In other words, describing nonpurity transgressions as "disgusting" is not fully the same as describing them as "angering." As well, nonpurity transgressions trigger facial movements associated with disgust, namely, activity of the levator labii muscle, which wrinkles the nose and/or raises the upper lip (Cannon, Schnall, & White, 2011; Chapman, Kim, Susskind, & Anderson, 2009). Finally, trait disgust predicts condemnation of nonpurity transgressions even when controlling for trait anger (Chapman & Anderson, 2014; Jones & Fitness, 2008).

The CPM's second claim is that disgust evoked by nonpurity transgressions subserves withdrawal/avoidance motivation in the moral domain. The logic here is that active, approach-related behaviors are not always the best way to deal with a transgression. Indeed, game-theoretic modeling shows that active punishment (which may entail a cost to the punisher) is almost always a less efficient strategy than rejection or avoidance (Ohtsuki, Iwasa, & Nowak, 2009). There is, however, only indirect support for the idea that withdrawal in the moral domain is tied to disgust. Nonmoral disgust in general is associated with withdrawal motivation (Rozin, Haidt, & McCauley, 2000), in contrast to the approach motivation linked to anger (Carver & Harmon-Jones, 2009). However, only one study has directly tested the potential link between moral disgust and withdrawal motivation, by asking participants whether they would be "willing to go to some effort" to avoid a transgressor (Hutcherson & Gross, 2011). This research actually found that anger, but not disgust, predicted avoidance, although the question wording may have suggested an active response more closely allied with anger than disgust. Thus more research is needed to test the claim that moral disgust is associated with withdrawal motivation. Such work should be careful to give participants an opportunity to actually express their behavioral tendencies, as perceived ability to attain a behavioral goal influences motivational intensity (Brehm & Self, 1989; Harmon-Jones, Sigelman, Bohlig, & Harmon-Jones, 2003).

A challenge for work seeking to link moral disgust to withdrawal is that most transgressions probably evoke both anger and disgust and hence will probably activate both approach and withdrawal tendencies. Here, the solution may be to use transgression stimuli that isolate the cognitive processes

hypothesized to lead to disgust and anger. This leads to the CPM's third claim: Disgust is linked to character judgments, whereas anger is linked to consequence judgments. In principle, it should be possible to dissociate the action tendencies associated with moral disgust and anger by using stimuli that primarily activate character or consequence judgments, respectively. This is also tricky, however, because it is easy to confound bad character and negative consequences. For example, given a stripped-down scenario such as hitting someone's finger with a hammer (Chakroff & Young, 2015) or slapping someone in the face (Chapman & Anderson, 2014), participants may default to the assumption that the negative consequences occurred because the transgressor is a bad person (Giner-Sorolla & Chapman, 2017).

One way to disentangle character and consequence judgments is to cross the presence or absence of the desire to cause harm, which indicates bad character, with the presence or absence of negative consequences (Giner-Sorolla & Chapman, 2017). For example, an individual might desire to cause harm but never act on it, or an individual may not desire harm but something bad happens anyway. Research in this vein has found that desire to commit harm predicts disgust and that this effect is mediated by the perception of bad character. By contrast, negative consequences predict anger but not disgust. These findings are consistent with the CPM's claim that moral disgust is driven by negative character evaluations, whereas moral anger is driven by negative consequence evaluations.

The CPM's third claim is that purity transgressions are judged to be immoral at least in part because they signal bad character. At present, there is only partial evidence for this claim. In general, behaviors that are statistically rare (Ditto & Jemmott, 1989; Fiske, 1980; McKenzie & Mikkelsen, 2007; Snyder, Kleck, Strenta, & Mentzer, 1979) and low in attributional ambiguity (Snyder et al., 1979) are perceived as highly informative about character traits. Purity transgressions, such as drinking urine or engaging in consensual incest, certainly satisfy these conditions (Uhlmann et al., 2015). By contrast, nonpurity transgressions such as theft may be more common and easier to attribute to circumstances. Indeed, individuals who commit purity transgressions (e.g., having sex with a dead chicken) are judged to have worse character than those who commit nonpurity transgressions (e.g., stealing a dead chicken), even though nonpurity transgressions are judged to be more immoral (Uhlmann & Zhu, 2013). Thus there is good evidence that purity transgressions signal bad character. Still missing, however, is evidence that purity transgressions are judged to be immoral *because* of the character judgments that they engender, as hypothesized by the CPM.

Finally, the CPM claims that at least some of the apparent cognitive differences between purity and nonpurity transgressions are due to differential activation of the same underlying cognitive processes, namely character and consequence judgments. This stands in contrast to the claim that qualitatively different cognitive processes underlie judgments about purity and nonpurity transgressions (Chakroff & Young, 2015; Graham et al., 2009).

Here it is critical to distinguish between the cognitive processes that influence moral judgments and the cognitive processes that influence feelings of disgust. According to the CPM, disgust evoked by purity transgressions has two sources: a core disgust evaluation (triggered by the presence of pathogens, biologically disadvantageous sex, etc.) and a character evaluation. The core disgust evaluation likely dominates the disgust response to most purity transgressions and is probably insensitive to the factors that influence wrongness judgments. For example, previous work has shown that disgust in response to purity transgressions is unaffected by whether or not the victim consented to the transgression (Russell & Piazza, 2014). This makes sense: Core disgust evaluations will be triggered whether or not the victim consented, because either way a core disgust stimulus was present. By contrast, wrongness judgments are attenuated when the victim consents to a purity transgression (Russell & Piazza, 2014). Thus the cognitive processes that influence disgust are not necessarily the same as those that influence moral judgments. In what follows, my focus is on the cognitive processes that influence moral judgments and whether they

might differ between purity and nonpurity transgressions.

First, some differences between purity and nonpurity transgressions can be easily explained by the idea that purity transgressions tend to activate character judgments to a greater extent than nonpurity transgressions. For example, people are more likely to make person-based attributions for purity transgressions than for nonpurity transgressions (Chakroff & Young, 2015). This fits nicely with the idea that purity transgressions may be an especially strong signal of bad character because of their statistical infrequency and low attributional ambiguity (Uhlmann et al., 2015). Note that nonpurity transgressions also trigger person-based attributions, albeit to a lesser extent, consistent with the idea that both transgression types can involve character judgments.

A related finding is that self-directed transgressions evoke more disgust (controlling for anger) than do other-directed transgressions (Chakroff et al., 2013). Self-directed transgressions were also associated with more negative character judgments than other-directed transgressions, consistent with the idea that disgust is related to character judgments. This suggests that what a person does to him- or herself may reveal character more than what he or she does to others. Indeed, whereas there could be situational reasons for doing something to someone else, we usually only do things to ourselves when we want to, and desires speak strongly to character.

Some differences between purity and nonpurity transgressions are difficult to explain using character and consequence judgments, and thus they could present a challenge to a strong version of the CPM in which character and consequence judgments are the *only* cognitive processes that contribute to differences between transgression types. For example, two studies have reported that the transgressor's intent matters less for moral judgments about purity transgressions than for judgments about nonpurity transgressions (Chakroff et al., 2013; Young & Saxe, 2011). It is difficult to see how this difference could be accounted for by the idea that purity transgressions tend to activate character judgments to a greater extent than do nonpurity transgressions. That said, the evidence for a difference in the role of intent across purity and nonpurity domains is actually somewhat mixed. For example, one study found no interaction between transgression type and intent for wrongness judgments (Russell & Giner-Sorolla, 2011b). Critics have also argued that the purity transgressions used in many studies are novel and bizarre (Gray & Keeney, 2015), to which I would add psychologically complex and potentially rife with confounds. Indeed, unintentional disgusting behaviors that are more everyday and innocuous (e.g., getting dog feces on one's hands when trying to clean it off one's shoes) are not judged as morally wrong at all (Chapman, 2017). In sum, it is currently not clear whether the role of intent really differs between purity and nonpurity transgressions.

One final difference between purity and nonpurity transgressions is also challenging for a strong version of the CPM. Specifically, generating reasons why someone might justifiably commit a purity transgression reduces wrongness ratings to a lesser extent than generating reasons why someone might commit a nonpurity transgression (Russell & Giner-Sorolla, 2011a). On the one hand, this could be because it is difficult to come up with *good* reasons for committing a purity transgression. Consistent with this idea, participants produce less elaborated justifications for their feelings of disgust compared with anger (Russell & Giner-Sorolla, 2011c). On the other hand, even when the scenario explicitly provides external reasons for committing the transgression, people judge that purity transgressions are more voluntary than nonpurity transgressions (Chakroff & Young, 2015). For example, a person who hits his sister in a game of truth or dare is judged to have acted more freely than a person who kisses his sister. This could suggest a genuine difference in the cognitive processes that underlie moral judgments about purity and nonpurity transgressions, which would be compatible with the weaker version of the CPM.

Extension and Expansion

The CPM is part of a new wave of research that emphasizes that character and conse-

quence judgments are distinct aspects of moral cognition (Uhlmann et al., 2015). An important future direction for this line of work will be to determine whether character and consequence judgments might be associated with different behavioral responses to moral transgressions. Most research on how people respond to transgressions has focused on punishment, especially punishment that entails a cost to the punisher (Carlsmith, Darley, & Robinson, 2002; Henrich et al., 2006). Costly punishment is just that, however: costly at worst, risky at best. In the grand scheme, therefore, punishment may be less important than rejection and avoidance, which fall under the umbrella of "partner choice" (Bull & Rice, 1991; Kuhlmeier, Dunfield, & O'Neill, 2014).

In spite of its potential importance, partner choice remains extremely understudied. For example, we do not know when people might opt for partner choice over punishment or what the motivational underpinnings of partner choice might be. The CPM points at potential answers to such questions. First, negative character evaluations may be a major reason for selecting partner choice over punishment. If a person transgresses because he or she has a fundamentally bad character, then he or she is likely to transgress again in the future, and efforts to deter such behavior (e.g., through punishment) are likely to be ineffective (Fischer & Roseman, 2007; Hutcherson & Gross, 2011). Second, given that disgust is hypothesized to subserve withdrawal and avoidance in the moral domain (Chapman & Anderson, 2013; Hutcherson & Gross, 2011), disgust may provide the motivation for partner choice. In sum, the CPM predicts that character evaluations should be a major predictor of partner choice and that disgust provides the motivation to reject and avoid transgressors.

To summarize, the CPM proposes that character and consequence evaluations both contribute to moral judgments and that these moral cognitive processes trigger the emotions of disgust and anger, respectively. In turn, disgust and anger motivate avoidance- and approach-related behavioral responses. This model parsimoniously explains why both purity and nonpurity transgressions trigger disgust and why purity transgressions are morally condemned; it can also account for at least some of the cognitive differences between purity and nonpurity transgressions. More evidence is certainly needed to shore up the CPM's claims, and the model must ultimately be expanded to include other important moral cognitive processes such as judgments of intent. Nonetheless, the CPM holds the promise of making sense of two decades' worth of work on moral disgust and of informing the fundamental debates about morality that this volume seeks to address.

NOTE

1. The CPM as depicted in Figure 8.1 focuses on the causes of moral disgust and anger rather than trying to provide a complete model of moral judgment. Thus, for simplicity, the model omits other critical moral cognitive processes, such as the role of intent judgments.

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