Moral Foundations Theory: On the Advantages of Moral Pluralism Over Moral Monism

Jesse Graham[1], Jonathan Haidt[2], Matt Motyl[3], Peter Meindl[4], Carol Iskiwitch[1], Marlon Mooijman[1]

[1]University of Southern California

[2]New York University, Stern School of Business

[3]University of Illinois, Chicago

[4]University of Pennsylvania

Abstract

What are the moral intuitions people have, and why do they have them? Moral Foundations Theory approaches this question through the four lenses of nativism, cultural learning, intuitionism, and pluralism.

Author Note

Correspondence concerning this article should be addressed to Jesse Graham, 3620 South McClintock Ave, Department of Psychology, University of Southern California, Los Angeles, CA, 90089; e-mail: jesse.graham@usc.edu.

1. Introduction

Moral Foundations Theory (MFT; Graham et al., 2013; Haidt & Joseph, 2004) was designed to explain both the variety and universality of moral judgments. It makes four central claims about morality.

1) There is a first draft of the moral mind. Nativism is the view that the mind is not a blank slate; it is organized in advance of experience. Evolutionary processes created a first draft of the mind, which is then edited by experience (Marcus, 2004). For example, young Rhesus monkeys, who showed no previous fear of snakes (including plastic snakes), watched a video of another monkey reacting fearfully (or not) to a plastic snake. The young Rhesus monkeys learned from a single exposure to the snake-fearing monkey to be afraid of the snake. These monkeys, though, did not learn to be fearful of other stimuli that they may not be "wired" to fear, like flowers (Mineka & Cook, 1988). These findings suggest that the monkeys may be predisposed to learning some things, and not other things. People may similarly be more prone to learning some moral values. For example, young children derive pleasure from fair exchanges and displeasure from unfair exchanges, potentially because this promotes more effective interactions between individuals within social groups (Tooby, Cosmides, & Barrett, 2005; Richerson & Boyd, 2005). Therefore, MFT is a nativist theory – it proposes that there is a first draft of the moral mind that developed in response to evolutionary pressures and is organized prior to experience.

2) The first draft of the moral mind gets edited during development within a culture. MFT is also a cultural theory that describes the "editing process" by which the universal first draft of the moral mind becomes a culturally specific and culturally competent adult morality. For example, Hindu cultures emphasize respect for elders and other authorities, as can be seen in the

common practice of children bowing to elders and often touching elders' feet. By the time these children reach adulthood, they have gained culturally-specific knowledge that may lead them to automatically initiate bowing movements when encountering elders or other revered people. In more individualistic and secular cultures that do not emphasize respect for authority, children are not taught to bow to elders. This might make it easier for them to address authority figures by first name or question their authority later in life. These different social practices in different cultures help explain cultural differences in moral values (e.g., Haidt, Koller, & Dias, 1993). The social practices are not written on a blank slate. It is highly unlikely that there could be a society in which bowing and feet-kissing were done as shows of disrespect or contempt, or were aimed primarily at one's subordinates. Primates have an innate toolkit for managing hierarchical relationships, but cultures vary in how they teach their children to apply these tools. You need to know something about this toolkit, this "first draft" of the moral mind, as well as the culture in which a mind develops.

3) Intuitions come first. MFT is an intuitionist theory that builds on the Social Intuitionist Model (SIM; Haidt, 2001). Like other types of evaluations, moral judgments happen quickly, often in less than one second of seeing an action or learning the facts of a case (Haidt, 2001; Zajonc, 1980). These judgments are associative, automatic, relatively effortless, rapid, and rely on heuristic processing; they occur by processes that many researchers call "System 1" thinking (Bruner, 1960; Kahneman, 2011; Stanovich & West, 2000). The SIM describes the many System 1 and System 2 processes that occur when people make moral judgments during social interactions. But the SIM says that automatic, System 1 processes generally occur first, and drive System 2 thinking, particularly when a person needs to invent a justification that can be shared with others.

4) There are many psychological foundations of morality. Lastly, MFT is a pluralist theory that posits that because there were numerous adaptive social challenges throughout evolutionary history, there are many different moral foundations that emerged in response to those challenges. Most research to date has concentrated on five moral foundations:

A) Care/harm: Mammals have an unusually long period of development during which they are dependent upon their caretakers. Therefore, caretakers who were more sensitive to the needs and distress of their children were more likely to have children survive into adulthood. This sensitivity generalizes beyond our own children, and can be activated when we learn of other people's children or even see photos of animal babies that activate our urges to care and protect, sometimes linked to anger toward the perpetrator of the harm.

B) Fairness/cheating: All social animals interact with each other, and while there are debates as to whether any non-human animals have a sense of "fairness" (see chapter 40 in this volume), there is little debate that the sense of fairness can be found across human cultures (Fiske, 1991), emerges well before the age of five, and possibly before the age of one (Hamlin, Wynn, & Bloom, 2007; LoBue, et al., 2011; see also Section IX of this volume), and is related to the evolutionary process that Trivers (1971) described in his famous article on reciprocal altruism. People monitor the behavior and reputations of others; those linked to cheating become less attractive as partners for future interactions.

C) Loyalty/betrayal: There are finite resources and coalitions compete for these resources. The coalitions that are most cohesive tend to prevail over less cohesive rival coalitions, as Darwin noted in *The Descent of Man* (1871) while wrestling with the question of the origins of morality. The intuitions generated by this foundation generalize to brand loyalty, political partisanship, and sports fandom today. When people show signs of being disloyal, they are

labeled as traitors and may be ostracized from their groups, or even put to death (e.g., treason is an offense punishable by death in the US). When people are loyal group members, they are extolled as virtuous (e.g., as patriots).

D) Authority/subversion: Primates evolved for life in hierarchies. Non-human alpha males are generally more like bullies than like leaders. Human alphas can go either way, but there can be little doubt that the psychology of authority is essential for understanding human political behavior (Boehm, 1999; De Waal, 1996). Groups and companies that have clear lines of authority, in which the authority is respected and seen as legitimate, generally function better than leaderless or normless groups, or groups with autocratic and domineering leadership (Pfeffer, 1998; Sherif, 1961). People who do not respect authorities or traditions are often ostracized or punished for insubordination.

E) Purity/degradation[1]: Pathogens and parasites threaten survival, and organisms that avoid contact with these contaminants are more likely to survive than their counterparts. The adaptive pressure to make accurate judgments about disease risk is especially strong for a group-living species whose diet includes scavenging, as seems to have been the case for early humans. The uniquely human emotion of disgust seems well-tuned as a "guardian of the mouth" for a highly social and omnivorous species (Rozin, Haidt, & McCauley, 2008) Research on the "behavioral immune system" (Schaller & Park, 2011) shows that contamination concerns can be generalized to social practices including being fearful of dissimilar others (e.g., immigrants) and a rejection of people who do not live in accordance with the group's sacred practices (e.g., LGBTQIA individuals in the eyes of many Christians).

---

[1] In Graham et al. (2013) we used the label Sanctity/degradation for this foundation; here we revert to the more widely-used Purity/degradation.

While most research has focused on these five moral foundations, there likely are many other moral foundations; example candidate foundations under investigation are liberty/oppression (Haidt, 2012; Iyer et al., 2012), equity/undeservingness (Meindl, Iyer, & Graham, 2017), and honesty/lying (Hofmann et al., 2014; Iyer, 2010).

2. Historical Context

Moral Foundations Theory arose from three streams of research: the cultural anthropology of morality, evolutionary psychology, and the "automaticity revolution" within social psychology. Below we highlight some key findings in each area that contributed to the development of MFT.

Until recently, most prominent theories in moral psychology conceived of the moral domain as a set of norms and regulations about how individuals should treat other individuals; theorists generally focused on concepts of harm, rights, and justice (e.g., Kohlberg, 1969; Turiel, 1983), or care and compassion (Gilligan, 1982; Hoffman, 1982). However, Shweder (2008; Shweder et al., 1997) proposed that this conception of morality reflected the distinctly individualistic conception of the self held widely in secular Western contexts. Based on his fieldwork in India, Shweder proposed that moral psychology had failed to address much – and perhaps even most – of the moral domain that would result from a more global survey of societies. People in all cultures may have moral and regulatory concepts related to harm, rights, and justice (which he called the "ethic of autonomy"), but in many cultures one can also find a concept of self as an office-holder in a social system, related to a set of moral and regulatory concepts such as loyalty and duty (which he called the "ethic of community"). One can also find conceptions of the self as a vessel for, or bearer of, a divine soul or spark, with moral and

regulatory notions that preserve one's purity and sanctity (which he called the "ethic of divinity").

Shweder's pluralistic conception of the moral domain mapped well onto the multiple findings and theories coming out of work on the evolution of moral behavior. Evolutionary psychologists have long held that innate mental structures, shaped over evolutionary time, predispose humans to certain behaviors, emotional reactions, and forms of learning. Bowlby's (1969) attachment theory was an explicitly evolutionary theory that rejected the unconstrained learning theories of Freudians and behaviorists. Trivers' (1971) classic paper on reciprocal altruism explained how a set of moral-emotional responses to cheaters and cooperators could have evolved as the psychological foundations of judgments of fairness. But how many of these evolved mechanisms are there, and which ones are the most important ones for understanding human morality?

To begin answering those questions, one must consider how moral judgments occur at the cognitive level. It has long been established that there exist two general forms of cognition, often called System 1 (fast, effortless, and intuition-based) and System 2 (slower, more effortful, involving conscious deliberate reasoning; see Bruner & Austin, 1986; Metcalfe & Mischel, 1999; see review in Kahneman, 2011). While Kohlberg's (1969) moral psychology focused on System 2 processes, the "automaticity revolution" of the 1990s shifted the focus of the field toward System 1. Bargh and Chartrand (1999), noting the remarkable accuracy of social judgments based on "thin slices" of behavior (Ambady & Rosenthal, 1992), questioned whether conscious thinking generally precedes judgments, or merely follows afterward. They wrote: "So it may be, especially for evaluations and judgments of novel people and objects, that what we think we are doing while consciously deliberating in actuality has no effect on the outcome of the judgment,

as it has already been made through relatively immediate, automatic means" (Bargh &

Chartrand, 1999, p. 475).

Drawing on this work, Haidt (2001) formulated the Social Intuitionist Model (SIM),

which proposed that moral evaluations generally occur rapidly, and derive from System 1

intuitive processing. System 2 plays many roles in moral judgment, but by its very nature it tends

to engage only after an initial System 1 evaluation is made, and it tends to be employed as people

engage in (or prepare to engage in) discussion with each other. Moral Foundations Theory was

created to go beyond the SIM: granting that "intuitions come first," what exactly are these

intuitions, where do they come from, how do they develop, and why does morality vary across

cultures?

In an effort to determine the best candidates for the foundations of moral thinking, Haidt

and Joseph (2004) surveyed anthropological and evolutionary approaches to moral judgment.

They searched for the concerns, perceptions, and emotional responses that occur in the accounts

of multiple anthropologists (e.g., reciprocity as described by Malinowski, 1922/2002), and that

also fit into existing evolutionary frameworks (e.g., Trivers' reciprocal altruism).

Haidt and Joseph drew from Shweder's theory of moral discourse, Fiske's (1991) models

of interpersonal relationships, Schwartz and Bilsky's (1990) theory of values, and evolutionary

models such as De Waal's (1996) "building blocks" of morality in other primates. They

identified five best candidates—five clear and direct bridges between the anthropological and

evolutionary literatures. These five became the original five foundations of MFT, although, as

we have said, we believe there are others. (For a review of the history of MFT and the

evolutionary basis of each foundation see Graham et al., 2013, and Haidt, 2012, chapters 6-8).

3. Theoretical Stance

MFT has been critiqued from the standpoint of multiple other theories in moral psychology. Some of these critiques have focused on MFT's central claim of nativism (e.g., Suhler & Churchland, 2011). Others have critiqued our embrace of intuitionism (e.g., Narvaez, 2008). But in the last few years, most critiques have centered around MFT's tenet of moral pluralism, with critics proposing alternative forms of pluralism or decomposing specific foundations. For instance, the Model of Moral Motives (Janoff-Bulman & Carnes, 2013; see also chapter 23 in this volume) proposes that—in addition to the five moral foundations—there also exist group-focused Social Justice concerns not covered by Care and Fairness. And Relationship Regulation Theory (Rai & Fiske, 2011; see also chapter 24 in this volume) argues that you need to examine the social relations in a given context in order to understand the dominant moral motivations at play (unity, hierarchy, equality, or proportionality). Others have argued that individual moral foundations as proposed by MFT can be multidimensional, with fairness being perceived as equality or equity (Meindl, Iyer, & Graham, 2017) or purity containing multiple components (Pizarro, 2016). These critiques and resulting debates have been fruitful in refining and reconciling different pluralist approaches to morality (see also Graham et al., 2013, section 4.3).

Perhaps the most active debate these days, however, is not between different *forms* of moral pluralism, but between moral pluralism and moral *monism*. By moral monism we mean theories stating that all morality can be boiled down to one thing, whether that one thing be reasoning about justice (Kohlberg, 1969), intuitive moral grammar (Mikhail, 2007), mutualistic fairness intuitions (Baumard, Andre, & Sperber, 2013), or perceptions of harm within a dyad (Gray, Schein, & Ward, 2014). MFT was created to capture the richness of moral diversity and

move moral psychology beyond monist moral accounts. Yet the pluralistic nature of morality remains a topic of scientific debate. For instance, Gray and colleagues (Gray & Keeney, 2015; Schein and Gray, 2015a, 2015b; see also chapter 37 of this volume) have proposed Dyadic Morality Theory, arguing that the seeming plurality in moral attitudes and beliefs can be fully explained by perceptions of harm. All moral judgments, in this view, are produced by a single process of linking stimuli to the cognitive template of an intentional agent causing harm to a vulnerable patient: "a dyadic template suggests not only that perceived suffering is tied to immorality, but that all morality is understood through the lens of harm" (Gray, Young, Waytz, 2012, p. 108). They apply this framework to political psychology, asserting that "moral disagreements can be understood with one simple question: 'what do liberals and conservatives see as harmful?'" (Schein & Gray, 2015b). We agree that if you had to pick one foundation as the most important single one, in terms of both importance and prototypicality, Care/harm is probably the best candidate. Evidence has been shown for the centrality, ubiquity, and prototypicality of harm in (negative) moral judgments (Gray et al., 2014; Schein & Gray, 2015a), and this is quite compatible with MFT (especially in WEIRD societies; see Haidt et al., 1993). However, no evidence has been found for DMT's more novel claim that all moral judgments work essentially the same at a cognitive level, and that all morality boils down to harm perception (for more on the gulf between DMT's claims and the evidence, see Haidt, Graham, & Ditto, 2015).

In addition, Gray and colleagues contrast this shape-shifting version of their own theory with a straw-man version of MFT as a theory of five Fodorian modules that are completely separate, non-overlapping, domain-specific, and fully encapsulated processing systems (see also chapter 10 in this volume). But in fact MFT employs the more flexible and overlapping notion of

modularity developed by anthropologists Sperber and Hirschfeld (2004). As explained in the main statement on MFT's modularity, the foundations are *developmental constructs* – they refer to what is innately given as part of the "first draft" of the evolved human mind, which then gets elaborated in culturally specific ways:

> Each of these five [sets of concerns] is a good candidate for a Sperber-style learning module. However, readers who do not like modularity theories can think of each one as an evolutionary preparedness (Seligman, 1971) to link certain patterns of social appraisal to specific emotional and motivational reactions. All we insist upon is that the moral mind is partially structured in advance of experience so that five (or more) classes of social concerns are likely to become moralized during development (Haidt & Joseph, 2007, p. 381).

Dyadic Morality proponents have recently sacrificed much of their parsimony by offering "harm pluralism" (see chapter 37 in this volume). The theory was extremely parsimonious in its original form, wherein all morality boils down to a specific harm: "harm involves the perception of two interacting minds, one mind (an agent) intentionally causing suffering to another mind (a patient)" (Schein & Gray, 2015a). But now with "harm pluralism" it is unclear whether a single template-matching process is still being argued for, or whether multiple different cognitive templates of harm (physical/emotional harm, cheating harm, group harm, disrespect harm, soul harm, etc.) are proposed. When harm is stretched and diluted so much that it means any kind of moral badness, then DMT becomes little more than the claim that moral judgments are intrinsically about dyads without providing any framework for understanding plurality in moral judgments (e.g., if group harm, disrespect harm, and soul harm are the harms that liberals and conservatives perceive differently, then how does DMT help explain why they do so?). Is DMT offering a semi-blank slate theory in which the dyadic template is innate, but all knowledge of kinds of harm is learned, and *anything* could be taught to kids to be harmful? Or is DMT saying (as MFT does) that there is something about evolved bodily processes that seems to

attract moralization in surprisingly similar forms around the world? Do Gray et al. say the cultural similarities are a coincidence, or do they posit some form of innate preparedness to learn about harmfulness, cheating, betrayal, disrespect, and degradation? If the latter, DMT has lost its claim to parsimony, and it's no longer clear what if anything the theory proposes that is really in contrast with MFT.

Dyadic morality could be usefully integrated with Moral Foundations Theory if one examines harm as more central than other foundations, without reducing these foundations to just less prototypical forms of harm. The empirical evidence in favor of this kind of moral pluralism is by now very extensive, while the evidence in support of monism is limited and contested (Graham, 2015; Haidt, Graham, & Ditto, 2015). We summarize these two bodies of evidence in the next section.

4. Evidence for MFT's Pluralism over Moral Monism

MFT rests on four falsifiable claims about human morality: nativism, cultural learning, intuitionism, and pluralism. As we noted previously, "if any of these claims is disproved, or is generally abandoned by psychologists, then MFT would need to be abandoned, too" (Graham et al., 2013). Here we examine evidence for one of the most contentious of these claims: pluralism. How do we know there are really multiple moral foundations, and that they don't all boil down to one thing, such as justice (Kohlberg, 1969) or perceptions of dyadic harm (Gray et al., 2014)? Studies showing differences between harm and impurity judgments have been critiqued recently by the monist argument that impurity is just a weird and less severe form of harm, and that impurity is no more than "(perceived) harm involving sex" (Gray & Keeney, 2015; see also Graham, 2015, on the absence of any evidence that harm/impurity differences are solely attributable to weirdness and severity). So as a test case we examine the evidence for pluralist

conceptions of (im)purity concerns, contra monist approaches that would see them as essentially reducible to harm (e.g., Gray et al., 2014).

First, Purity/degradation judgments predict important thoughts and behaviors over and above Care/harm judgments. For instance, purity concerns uniquely predict (beyond other foundations and demographics such as political ideology) culture-war attitudes about gay marriage, euthanasia, abortion, and pornography (Koleva et al., 2012). Purity also predicts opposition to stem cell research (Clifford & Jerit, 2013), environmental attitudes (Rottman, Kelemen, & Young, 2015), lawsuits (Buccafusco & Fagundes, 2015), and social distancing in real-world social networks (Dehghani et al., 2016). Moral concerns about impurity uniquely predict moral judgments of suicide, far more than do judgments about harm (Rottman, Kelemen, & Young, 2014a, 2014b). In line with multiple demonstrations of basic discriminant validity between the foundations (Graham et al., 2011), several recent studies showed that purity judgments are a stronger predictor of disgust sensitivity than are judgments related to any other foundation (Wagemans, Brandt, & Zeelenberg, 2017). Finally, even responses to sacrificial dilemmas (which require harming one person to avoid harming several others) are predicted by multiple foundations, not just Care/harm:

> Inconsistent with Moral Dyad Theory, our results did not support the prediction that Harm concerns would be the unequivocally most important predictor of sacrifice endorsement. Consistent with Moral Foundations Theory, however, multiple moral values are predictive of sacrifice judgments: Harm and Purity negatively predict, and Ingroup positively predicts, endorsement of harmful action in service of saving lives, with Harm and Purity explaining similar amounts of unique variance. The present study demonstrates the utility of pluralistic accounts of morality, even in moral situations in which harm is central (Crone & Laham, 2015).

Second, impurity judgments can actively *do* things that harm judgments cannot. Framing environmental issues in terms of purity (vs. harm) experimentally increased moderate and conservative support for environmental initiatives up to liberal levels (Feinberg & Willer, 2013).

Purity framing also reduced polarization on the Affordable Care Act (Feinberg & Willer, 2015) and increased conservatives' liberal attitudes more generally (Day, Fiske, Downing, & Trail, 2014). Group-based discrimination in moral judgment has been shown to be specific to the domain of moral purity: purity information can experimentally increase both praise and condemnation of others (Masicampo, Barth, & Ambady, 2014). Similarly, exposure to purity similarity information can experimentally reduce social distancing, moreso than similarity information related to any other moral concerns (Dehghani et al., 2016). And studies of the processes of moralization through "moral shock" (e.g., increasing moral convictions about abortion following graphic pictures of aborted fetuses) showed that such moralization is mediated by disgust and not by anger or harm appraisals, disconfirming dyadic morality on its own terms (Wisneski & Skitka, 2016).

Third, there is growing evidence that moral judgments about harm vs. impurity operate in different ways at a cognitive level. These different kinds of judgments have been associated with different facial micro-expressions (Cannon, Schnall, & White, 2011) and neural systems (Parkinson, Sinnott-Armstrong, Koralus, Mendelovici, McGeer, & Wheatley, 2011). Unique developmental pathways for purity judgments have been proposed, involving both feelings and normative information in concert (Rottman & Kelemen, 2012). Impurity and harm judgments respond in opposite ways to experimental manipulations of abstract/concrete mindsets (Napier & Luguri, 2013) and approach/avoidance motivations (Cornwell & Higgins, 2013); further, priming parental status increases severity of purity judgments, but not harm judgments (Eibach, Libby, & Ehrlinger, 2009). Purity concerns have been shown to function to protect the self, while harm concerns function to protect others (Chakroff, Dungan, & Young, 2013). A study of the "symbolic purity of mind" concluded that religious people felt intuitive disgust at their own

heretical thoughts, a disgust that was "meaningfully distinct from anger as a moral emotion" (Ritter, Preston, Salomon, & Relihan-Johnson, 2015). Intention has been shown to matter less for impurity than for harm judgments (Young & Saxe, 2011), and this is supported by the finding that accidental vs. intentional harms produce differential activation in the right temperoparietal junction, while accidental vs. intentional purity violations show no such distinction (Chakroff, Dungan, Koster-Hale, Brown, Saxe, & Young, 2015). Compared to harm judgments, impurity judgments involve less condemnation of the act itself but more condemnation of the actor (Uhlmann & Zhu, 2013); this "harmful situations, impure people" attribution asymmetry for purity vs. harm judgments has also been found while controlling for severity and weirdness (Chakroff & Young, 2015).

Even in their attempt to explain away all these harm/impurity differences as merely attributable to weirdness and severity, Gray and Keeney (2015) were forced to conclude "as in Study 2, this suggests that severity and weirdness likely do not account for all differences between harm and impurity scenarios." While more evidence exists for some foundation distinctions than others – for example, not much work has been done differentiating Loyalty from Authority judgments – the evidence on Care vs. Purity (and on individualizing vs. binding foundations more generally) clearly supports some form of moral pluralism, and calls into question monist theories of moral judgment.

5. Extension and Expansion

The ongoing debates and plurality of approaches in this *Atlas* demonstrate that this is the golden age of the science of morality (see also Graham & Valdesolo, in press). In its first decade, MFT has substantially expanded the range of moral concerns under investigation in moral psychology, by encouraging researchers to look beyond individual harm and fairness. In the next

decade, we expect that MFT will continue to develop, both theoretically and methodologically. Following the idea of method-theory co-development (Graham et al., 2013), new constructs (e.g., liberty/oppression concerns) are explored as new methods and measures are developed, such as the recently validated Moral Foundations Vignettes (Clifford et al., 2016) and current efforts to update and improve the Moral Foundations Questionnaire (Graham et al., 2011). MFT is also likely to be applied to increasingly more fields outside of psychology, such as information technology (Dehghani et al., 2014), law (Silver & Silver, 2017), sociology (Vaisey & Miles, 2014), organizational behavior (Fehr, Yam, & Dang, 2015), sustainability science (Watkins, Aitken, & Mather, 2016), ethics education (Andersen et al., 2015), media studies (Tamborini, 2011), and agricultural ethics (Makiniemi et al., 2014).

Finally, we expect that MFT will continue to be useful for understanding political differences and debates. Richard Shweder and other anthropologists have long been arguing that the moral domain is far broader than what was being studied by researchers coming from a secular Western perspective—what we would now call a WEIRD perspective (Henrich, Heine, & Norenzayan, 2010). MFT was created to further develop this insight by offering a list of specific foundations. MFT was not created to study political differences, but it was immediately put to that use as political polarization continued to rise in the United States and left and right came to seem increasingly like separate cultures (Haidt & Graham, 2007). MFT has often been used as the basis for advice given to left-leaning parties, to help them see what they often failed to see about conservative morality: Conservatives care far more about moral issues related to loyalty (e.g., patriotism and nationalism), authority (e.g., law and order, respect for parents and the police), and purity (e.g., religious and traditional restrictions on sexuality and drug use; perceptions of moral decay more generally).

America and Europe are now being convulsed by political movements whose morality is quite explicitly based on the Loyalty, Authority, and Purity foundations. These movements embrace the label "nationalism;" some of them even embrace a "blood and soil" version of nationalism that is often linked to theories of racial supremacy (Graham & Haidt, 2012). In every Western country with a populist rebellion, people are angry at the "globalist" or "cosmopolitan" elite and its morality which seems (to the nationalists) to be based primarily on the Care foundation.

The year 2016 will long be remembered as the year that the educated elite in many Western countries realized that they do not understand the morality of many of their fellow citizens. MFT offers them a way to do so; monist theories do not. MFT has offended intellectuals on the left, who claim that it legitimizes right-wing moralities by dignifying them as real human moralities, rather than condemning them as pathologies or self-soothing mechanisms. But MFT is not a normative theory of the moral concerns people *should* have; it is a descriptive theory of the moral concerns people *do* have (Graham, 2014). The simple fact is that every human community, from street gangs to corporations to academic fields such as social psychology, develops a moral order, a moral "matrix," within which their moral lives take place and their political views are formed.

Moral psychology is hard because—like anthropology—it requires researchers to step outside their matrix and study other matrices without bias. In the process, they often learn a great deal about their home culture. The coming years would be a very good time for social scientists to commit themselves to understanding moralities that are not their own, and that they may even find personally offensive. MFT can help.

References

Ambady, N., & Rosenthal, R. (1992). Thin slices of expressive behavior as predictors of interpersonal consequences: A meta-analysis. *Psychological Bulletin*, *111*, 256-274.

Andersen, M. L., Zuber, J. M., & Hill, B. D. (2015). Moral Foundations Theory: An Exploratory Study with Accounting and Other Business Students. *Journal of Business Ethics*, *132*, 525-538.

Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. *American Psychologist*, *54*, 462-479.

Baumard, N., André, J. B., & Sperber, D. (2013). A mutualistic approach to morality: The evolution of fairness by partner choice. *Behavioral and Brain Sciences*, *36*(1), 59-78.

Boehm, C. (1999). *Hierarchy in the forest: The evolution of egalitarian behavior*. Cambridge, MA: Harvard University Press.

Bowlby, J. (1969). *Attachment and Loss: Vol.1: Attachment*. New York: Basic.

Bruner, J. S. (1960). *The Process of Education*. Cambridge, MA: Harvard University Press.

Bruner, J. S., & Austin, G. A. (1986). *A Study of Thinking*. Transaction Publishers.

Buccafusco, C. J., & Fagundes, D. (2015). The Moral Psychology of Copyright Infringement. *Minnesota Law Review*, *100*. http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id =429612.

Cannon, P. R., Schnall, S., & White, M. (2011). Transgressions and expressions Affective facial muscle activity predicts moral judgments. *Social psychological and personality science*, *2*(3), 325-331.

Chakroff, A., Dungan, J., Koster-Hale, J. Brown, A., Saxe, R., & Young, L. (2015). When minds matter for moral judgment: intent information is neurally encoded for harmful but not impure acts. *Social Cognitive and Affective Neuroscience*, nsv131.

Chakroff, A., Dungan, J., Young, L. (2013). Harming ourselves and defiling others: what determines a moral domain? *PLoS One*, *8*(9), e74434.

Chakroff, A., Young, L. (2015). Harmful situations, impure people: an attribution asymmetry across moral domains. *Cognition*, *136*, 30–37.

Clifford, S., & Jerit, J. (2013). How words do the work of politics: Moral foundations theory and the

> debate over stem cell research. *The Journal of Politics, 75*(3), 659-671.

Clifford, S., Iyengar, V., Cabeza, R., & Sinnott-Armstrong, W. (2015). Moral foundations vignettes: A

> standardized stimulus database of scenarios based on moral foundations theory. *Behavior
>
> Research Methods*, *47*, 1178-1198.

Cornwell, J. F., & Higgins, E. T. (2013). Morality and its relation to political ideology: The role of

> promotion and prevention concerns. *Personality and Social Psychology Bulletin, 39,* 1164-1172.

Crone, D. L., & Laham, S. M. (2015). Multiple moral foundations predict responses to sacrificial

> dilemmas. *Personality and Individual Differences*, *85*, 60-65.

Darwin, C. (1871). The descent of man, 2 Vols. *London*, *81*, 130-1.

Day, M. V., Fiske, S. T., Downing, E. L., & Trail, T. E. (2014). Shifting liberal and conservative attitudes

> using moral foundations theory. *Personality and Social Psychology Bulletin*, *40*(12), 1559-1573.

De Waal, F. B. M. (1996). *Good natured: The origins of right and wrong in humans and other animals*.

> Cambridge, MA: Harvard University Press.

Dehghani, M., Sagae, K., Sachdeva, S., Gratch, J. (2014). Analyzing Political Rhetoric in Conservative

> and Liberal Weblogs Related to the Construction of the "Ground Zero Mosque." *Journal of
>
> Information Technology & Politics, 11,* 1-14.

Dehghani, M., Johnson, K. M., Hoover, J., Sagi, E., Garten, J., Parmar, N. J., Vaisey, S., Iliev, R., &

> Graham, J. (2016). Purity homophily in social networks. *Journal of Experimental Psychology:
>
> General*, *145*(3), 366.

Eibach, R. P., Libby, L. K., & Ehrlinger, J. (2009). Priming family values: How being a parent affects

> moral evaluations of harmless but offensive acts. *Journal of Experimental Social Psychology*,
>
> *45*(5), 1160-1163.

Fehr, R., Yam, K. C. S., & Dang, C. (2015). Moralized leadership: The construction and consequences of

> ethical leader perceptions. *Academy of Management Review*, *40*, 182-209.

Feinberg, M., & Willer, R. (2013). The moral roots of environmental attitudes. *Psychological Science*, *24*(1), 56-62.

Feinberg, M., & Willer, R. (2015). From Gulf to Bridge: When Do Moral Arguments Facilitate Political Influence?. *Personality and Social Psychology Bulletin*, *41*(12), 1665-1681.

Fiske, A. P. (1991). *Structures of social life: The four elementary forms of human relations: Communal sharing, authority ranking, equality matching, market pricing*. Free Press.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.

Graham, J. (2014). Descriptive vs. normative psychology. Retrieved March 1, 2017, from http://www.yourmorals.org/blog/2014/12/descriptive-vs-normative-moral-psychology/.

Graham, J. (2015). Explaining away differences in moral judgment: Comment on Gray & Keeney. *Social Psychological and Personality Science, 6,* 869-873.

Graham, J., & Haidt, J. (2012). Sacred values and evil adversaries: A moral foundations approach. In P. Shaver & M. Mikulincer (Eds.), *The Social Psychology of Morality: Exploring the Causes of Good and Evil* (pp. 11-31). New York: APA Books.

Graham, J., Haidt, J., Koleva, S., Motyl, M., Iyer, R., Wojcik, S. P., & Ditto, P. H. (2013). Moral foundations theory: The pragmatic validity of moral pluralism. *Advances in Experimental Social Psychology*, *47*, 55-130.

Graham, J., Haidt, J., & Nosek, B.A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology, 96,* 1029-1046.

Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology, 101,* 366-385.

Graham, J., & Valdesolo, P. (in press). Morality. In K. Deaux & M. Snyder (Eds.), *The Oxford Handbook of Personality and Social Psychology.* Oxford, UK: Oxford University Press.

Gray, K., & Keeney, J. (2015). Impure, or Just Weird? Scenario Sampling Bias Raises Questions about the Foundation of Morality. *Social Psychology and Personality Science, 6,* 859-868.

Gray, K., Schein, C., & Ward, A. F. (2014). The myth of harmless wrongs in moral cognition: Automatic

    dyadic completion from sin to suffering. *Journal of Experimental Psychology: General*, *143*(4),

    1600.

Gray, K., Young, L., & Waytz, A. (2012) Mind perception is the essence of morality. *Psychological*

    Inquiry, *23*, 101-124.

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment.

    Psychological Review, *108*, 814-834.

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. New York:

    Pantheon.

Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that

    liberals may not recognize. *Social Justice Research, 20,* 98-116.

Haidt, J., Graham, J., & Ditto, P. H. (2015). Dyadic morality is the Volkswagen of moral psychology.

    Retrieved March 1, 2017, from http://www.spsp.org/blog/volkswagen-of-morality.

Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally

    variable virtues. *Daedalus*, *133*, 55-66.

Haidt, J., Koller, S., & Dias, M. (1993). Affect, culture, and morality, or is it wrong to eat your dog?

    Journal of Personality and Social Psychology, *65*, 613-628.

Hamlin, K., Wynn, K., & Bloom, P. (2007). Social evaluation by preverbal infants. *Nature*, *450*, 557-559.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and*

    Brain Sciences, *33*, 61-83.

Hoffman, M. L. (1982). Development of prosocial motivation: Empathy and guilt. In N. Eisenberg (Ed.),

    The development of prosocial behavior (pp. 218–231). New York: Academic Press.

Hofmann, W., Wisneski, D. C., Brandt, M. J., & Skitka, L. J. (2014). Morality in everyday life. *Science*,

    345(6202), 1340-1343.

Iyer, R. (2010). The Case for Honesty as a Moral Foundation. Retrieved June 26, 2012 from

    http://www.polipsych.com/2010/12/07/the-case-for-honesty-as-a-moral-foundation/.

Iyer, R., Koleva, S. P., Graham, J., Ditto, P. H., & Haidt, J. (2012). Understanding Libertarian morality: The psychological roots of an individualist ideology. *PLoS One*, *7*(8), e42366.

Janoff-Bulman, R., & Carnes, N. C. (2013). Surveying the moral landscape moral motives and group-based moralities. *Personality and Social Psychology Review*, *17*(3), 219-236.

Kahneman, D. (2011). *Thinking, Fast and Slow*. New York: Farrar, Strauss, Giroux.

Kohlberg, L. (1969). Stage and sequence: The cognitive-developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization theory and research* (pp. 347-480). Chicago: Rand McNally.

Koleva, S., Graham, J., Haidt, J., Iyer, R., & Ditto, P. H. (2012). Tracing the threads: How five moral concerns (especially Purity) help explain culture war attitudes. *Journal of Research in Personality, 46,* 184-194.

LoBue, V., Chiong, C., Nishida, T., DeLoache, J., & Haidt, J. (2011). When getting something good is bad: Even 3-year-olds react to inequality. *Social Development*, *2011*, 154-170.

Mäkiniemi, J. P., Pirttilä-Backman, A. M., & Pieri, M. (2013). The endorsement of the moral foundations in food-related moral thinking in three European countries. *Journal of Agricultural and Environmental Ethics*, *26*, 771-786.

Malinowski, B. (1922/2002). *Argonauts of the Western Pacific: An account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea*. Routledge.

Marcus, G. (2004). *The Birth of the Mind*. New York: Basic.

Masicampo, E. J., Barth, M., & Ambady, N. (2014). Group-based discrimination in judgments of moral purity-related behaviors: Experimental and archival evidence. *Journal of Experimental Psychology: General*, *143*(6), 2135.

Meindl, P., Iyer, R., & Graham, J. (2017). A pleasure/power principle of justice: Distributive justice beliefs are guided by societal concerns for pleasure and power. Manuscript submitted for publication.

Metcalfe, J., & Mischel, W. (1999). A hot/cool-system analysis of delay of gratification: dynamics of willpower. *Psychological Review*, *106*(1), 3.

Mikhail, J. (2007). Universal moral grammar: theory, evidence and the future. *Trends in cognitive sciences*, *11*(4), 143–152.

Mineka, S., & Cook, M. (1988). Social learning and the acquisition of snake fear in monkeys. In T. R. Zentall & J. B. G. Galef (Eds.), *Social learning: Psychological and biological perspectives* (pp. 51-74). Hillsdale, N. J.: Lawrence Erlbaum.

Monbiot, G. (2005). The new chauvinism. *The Guardian*, *9*(8), 2005.

Napier, J. L., & Luguri, J. B. (2013). Moral mind-sets: Abstract thinking increases a preference for "individualizing" over "binding" moral foundations. *Social Psychological and Personality Science, 4,* 754-759.

Narvaez, D. (2008). The social-intuitionist model: Some counter-intuitions. In W. A. Sinnott-Armstrong (Ed.), *Moral Psychology, Vol. 2, The Cognitive Science of Morality: Intuition and Diversity* (pp. 233-240). Cambridge, MA: MIT Press.

Parkinson, C., Sinnott-Armstrong, W., Koralus, P. E., Mendelovici, A., McGeer, V., & Wheatley, T. (2011). Is morality unified? Evidence that distinct neural systems underlie moral judgments of harm, dishonesty, and disgust. *Journal of Cognitive Neuroscience*, *23*(10), 3162-3180.

Pfeffer, J. (1998). *The human equation: Building profits by putting people first*. Harvard Business Press.

Pizarro, D. (2016). Disgust and the domain of moral purity. Paper presented at the Annual convention of the Society for Personality and Social Psychology, San Diego, CA.

Richerson, P. J., & Boyd, R. (2005). *Not by genes alone: How culture transformed human evolution*. Chicago: University of Chicago Press.

Ritter, R. S., Preston, J. L., Salomon, E., & Relihan-Johnson, D. (2015). Imagine no religion: Heretical disgust, anger and the symbolic purity of mind. *Cognition and Emotion*, *30*, 778-796.

Rottman, J., & Kelemen, D. (2012). Aliens behaving badly: Children's acquisition of novel purity-based morals. *Cognition, 124*, 356–360.

Rottman, J., Kelemen, D., & Young, L. (2014a). Tainting the soul: Purity concerns predict moral

      judgments of suicide. *Cognition*, *130*, 217-226.

Rottman, J., Kelemen, D., & Young, L. (2014b). Purity matters more than harm in moral judgments of

      suicide: Response to Gray (2014). *Cognition, 133*(1), 332–334.

Rottman, J., Kelemen, D., & Young, L. (2015). Hindering harm and preserving purity: How can moral

      psychology save the planet? *Philosophy Compass*, *10*(2), 134–144.

Rozin, P., Haidt, J., & McCauley, C. R. (2008). Disgust. In M. Lewis, J. M. Haviland-Jones & L. F.

      Barrett (Eds.), *Handbook of Emotions, 3rd ed.* (pp. 757-776). New York: Guilford.

Schaller, M., & Park, J. H. (2011). The behavioral immune system (and why it matters). *Current*

      Directions in Psychological Science, *20*, 99-103.

Schein, C., & Gray, K. (2015a). The unifying moral dyad: Liberals and conservatives share the same

      harm-based moral template. *Personality and Social Psychology Bulletin*, *41*(8), 1147–1163.

Schein, C., & Gray, K. (2015b). Making sense of moral disagreement: Liberals, conservatives, and the

      harm-based template they share. Retrieved March 1, 2017, from

      http://www.spsp.org/blog/making-sense-of-moral.

Schwartz, S. H., & Bilsky, W. (1990). Toward a theory of the universal content and structure of values:

      Extensions and cross-cultural replications. *Journal of personality and social psychology*, *58*(5),

      878.

Sherif, M., Harvey, O. J., White, B. J., Hood, W., & Sherif, C. (1961/1954). *Intergroup conflict and*

      cooperation: The Robbers Cave experiment. Norman, OK: University of Oklahoma Institute of

      Group Relations.

Shweder, R. A. (2008). The Cultural Psychology of Suffering: The Many Meanings of Health in Orissa,

      India (and Elsewhere). *Ethos, 36,* 60–77.

Shweder, R., Much, N., Mahapatra, M., & Park, L. (1997). Divinity) and the "Big Three" Explanations of

      Suffering. *Morality and Health*, *119*, 119-169.

Stanovich, W., & West, R. F. (2000). Individual difference in reasoning: implications for the rationality debate? *Behavioral and Brain Sciences*, *23*, 645–726.

Suhler, C. L., & Churchland, P. (2011). Can innate, modular "foundations" explain morality? Challenges for Haidt's moral foundations theory. *Journal of Cognitive Neuroscience*, *23(9)*, 2103-2116.

Tamborini, R. (2011). Moral intuition and media entertainment. *Journal of Media Psychology, 23,* 39-45.

Tooby, J., Cosmides, L., & Barrett, H. C. (2005). Resolving the debate on innate ideas: Learnability constraints and the evolved interpenetration of motivational and conceptual functions. In P. Carruthers, S. Laurence & S. Stich (Eds.), *The innate mind: Structure and contents* (pp. 305-337). New York: Oxford.

Trivers, R. L. (1971). The evolution of reciprocal altruism. *Quarterly Review of Biology*, *46*, 35- 57.

Turiel, E. (1983). *The development of social knowledge: Morality and convention*. Cambridge, England: Cambridge University Press.

Uhlmann, E. L., & Zhu, L. (2013). Acts, persons, and intuitions: Person-centered cues and gut reactions to harmless transgressions. *Social Psychological and Personality Science*, *5*, 279-285.

Vaisey, S., & Miles, A. (2014). Tools from moral psychology for measuring personal moral culture. *Theory and Society*, *43*, 311-332.

Wagemans, F. M. A., Brandt, M. J., & Zeelenberg, M. (2017). Disgust sensitivity is primarily associated with Purity-based moral judgments. Retrieved from https://osf.io/preprints/psyarxiv/tvs2b/.

Watkins, L., Aitken, R., & Mather, D. (2016). Conscientious consumers: a relationship between moral foundations, political orientation and sustainable consumption. *Journal of Cleaner Production*, *134*, 137-146.

Wisneski, D. C., & Skitka, L. J. (2016). Moralization through moral shock: Exploring emotional antecedents to moral conviction. *Personality and Social Psychology Bulletin*, *43,* 139-150.

Young, L., Saxe, R. (2011). When ignorance is no excuse: Different roles for intent across moral domains. *Cognition*, *120*, 202-214. doi:10.1016/j.cognition.2011.04.005

Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist*, *35*,

151-175.