

Reason and Emotion in Moral Judgment:
Different Prototypes Lead to Different Theories

Benoît Monin
Stanford University

David A. Pizarro
Cornell University

Jennifer S. Beer
University of California, Davis

Chapter to be included in K.D. Vohs, R. F. Baumeister, & G. Loewenstein (in press). *Do emotions help or hurt decision making?: A hedgefoxian perspective*. New York: Russell Sage Foundation.

Corresponding author:
Benoît Monin
monin@stanford.edu

Reason and Emotion in Moral Judgment:
Different Prototypes Lead to Different Theories

Of the many types of decisions considered in this volume, few have as much impact on our relationships and self-image as judgments related to morality. Besides, it seems important to include a chapter on morality in a book on emotion, as an increasingly influential school of thought stresses the importance of emotions in moral judgment. In fact, one of the major debates in the current study of morality in psychology pits emotion against reason – one side arguing that moral judgment follows from emotional reactions, the other re-asserting the role of conscious reasoning in arriving at moral conclusions. The goal of this chapter is not to take sides in this debate. Instead, we hope to present the major issues involved, and attempt to reconcile competing accounts of moral judgment by proposing that they are compatible. While it may sometime seem that moral psychologists from opposing sides of the debate describe different species of *Homo Moralis*, we propose that they are talking about the same being, albeit in varying prototypical situations: Those focusing on complex hypothetical dilemmas are likely to see moral judgment as the result of deliberative abstract reasoning, while those focusing on reacting to the transgressions of others are likely to see moral judgment as the result of quick emotions like contempt, anger or disgust. Both views might be correct, as both models represent judgment well, as long as you restrain each to its indigenous situation. We argue that favoring one view is ignoring the diversity of moral situations that people encounter in their everyday life. As evidence of this diversity, we'll suggest that some authors have in mind yet other prototypical situations when investigating morality, and that considering one of these as the modal moral situation yields yet another model of morality, one that doesn't necessarily fit the reason/emotion

dichotomy. For example, we'll suggest that if the typical moral situation that researchers had in mind was not solving dilemmas or judging others but instead resisting temptation (admittedly an important part of our moral lives), then models of moral behavior would be less focused on reasoning or emotion and instead give a bigger place to willpower and self-control.

The general point we hope to make is that disagreements about what empirical research tells us about moral judgment may unwittingly be the result of divergent assumptions about what constitutes the ideal type situation of moral judgment in the first place. Accordingly, we briefly review the history of the debate between the “emotionalist” and “rationalist” approaches to moral judgment, and then lay out the framework that we hope can illuminate the debate. We present our four examples of prototypical moral situations, which we call moral reactions, moral dilemmas, moral weakness, and moral fortitude, showing for each how it leads to a different perception of moral judgment. Finally, we use this framework to inform the question of what it means to be a virtuous individual, introducing four archetypes (the sheriff, the philosopher, the monk and the wrestler) that correspond to each of the prototypical situations.

A short history of emotion and reason in moral judgment

One question that has troubled moral philosophers and psychologists for some time is whether moral judgments are primarily the fruits of reason or emotion. One tradition holds that moral judgments are largely the output of our emotional system. A competing tradition holds that while emotions are often heavily involved in the process of moral judgment, at heart our moral beliefs exist because of the distinctly human ability to reason—and thus to distinguish right from wrong. The tension between these two positions has a long history, best exemplified in the debate between the philosophers Immanuel Kant (1785) and David Hume (1777), in part because the truth of the matter was seen to have serious implications for the status of morality. If the

moral notions that guide people's everyday moral pronouncements were the unreflective output of emotion, then the task of assessing the validity of such moral beliefs became problematic: If a behavior shocks me but not my neighbor, who's to say if it's morally right or wrong? On the other hand, moral beliefs grounded in reason were, by virtue of the reliability of the reasoning process, more likely to be agreed upon by all as truth. The question of whether moral beliefs could be understood as objectively "true" (on par with, for instance, the law of gravity) is what kept the debate alive (e.g., Ayer, 1952), until the descriptive facts of the matter—whether the moral judgments that we make on a daily basis are actually a product of emotional reactions or a product of reasoned deliberation—took center stage. And with this shift from what moral thinking ought to be to what is actually looks like, psychologists realized that they had a role to play.

Rationalism in moral psychology

Interestingly, within moral psychology, the rationalist position emerged as an early winner. Theorists such as Piaget (1932) and Kohlberg (1969) fell squarely on the side of Kant (1785) and Rawls (1999). The ability to reason was seen as the supreme path to distinguishing right from wrong. For example, in Kohlberg's view, moral judgment develops as a function of the developing cognitive abilities of the child—as reason develops, so moral beliefs mature. Most modern rationalists hold reason to be at the helm of thought and behavior at least some of the time, even if the impact of reasoning on judgment is mediated through emotional mechanisms (e.g., Pizarro & Bloom, 2003). They paint a picture in which reason can influence the emotional system. Evidence for this position often takes the form of demonstrating that: (1) reasoning can influence initial emotional reactions (e.g., appraisal theory; Lazarus, 1991), (2) reason can regulate emotions in order to serve pre-existing, reasoned goals (e.g., Gross, 1999),

and (3) reasoning processes can be readily observed when individuals are faced with moral dilemmas (e.g., Kohlberg, 1969). Even in the face of evidence suggesting that moral judgments are *always* made with a large dose of accompanying emotions, the rationalist position can still claim that reasoning causally influences these emotions and resulting judgments.

In the last few decades, however, this dominant rationalist framework has been increasingly called into question in other areas of psychology. Psychologists have become acutely aware of the limits of human reasoning (e.g., Kahneman & Frederick, 2002; Simon, 1967; Nisbett & Wilson, 1977). For better or for worse, the human mind, while often making efficient use of limited processing power and information, can be shown to err in a reliable fashion. And the heuristics that are responsible for these errors, although perhaps rational in a broad sense, are characterized by a lack of rational deliberation. Adding insult to injury, we seem to make generous use of information that isn't even consciously accessible—effectively preempting our ability to utilize rational deliberation for many of our judgments (e.g., Greenwald & Banaji, 1995; Bargh, 1994). These advances all contributed to weaken the grip of the strict rationalist framing on moral psychology.

Emotionalism in moral psychology

Besides cracks in the pedestal of rationalism, a second important factor in the emergence of the emotionalist perspective was the considerable rebirth of interest in emotional processes, a historically fickle topic within psychology. This body of research points to the fact that emotions are a much more powerful influence on judgment than was previously believed. Emotions seem to pervade human judgment, and people are often unwittingly influenced by emotional responses that have nothing to do with the judgment at hand (e.g., Schwarz & Clore, 1983; Bodenhausen,

Sheppard, & Kramer, 1994; Lerner & Keltner, 2001). These insights have done serious damage to the view of humans as ideal rational creatures.

In contrast to rationalism, the emotionalist perspective (Kagan, 1984; Haidt, 2001; Prinz, 2006) posits that emotions take a primary role as the causes of moral judgment and decision-making. Evidence for the emotionalist approach often takes the form of demonstrating (1) the thoughtless nature of many emotional reactions (Zajonc, 1980), (2) the strong emotional reactions observed when individuals are making moral judgments (especially when judging the moral infractions of others – e.g., Haidt, Koller, & Dias, 1993), (3) the “dumbfounding” nature of many moral judgments (i.e., the apparent inability to defend judgments rationally when asked – see Haidt, 2001), or (4) the fact that many moral judgments seem to conflict with rational normative theories of morality (e.g., consequentialism). While traditionally the underdog theory of moral judgment, emotionalism has emerged as an increasingly influential framework for understanding moral judgment in recent years (Haidt, 2001).

While any psychologist working on these issues will likely respond that the truth is much more complex than a simple emotion/reason dichotomy, the debate between emotionalism and rationalism nonetheless lives on as one of theoretical emphasis. And a divergence of emphases remains (e.g., Haidt, 2001; Pizarro & Bloom, 2003).

Different situations, different models of morality

If the story ended here, it would be quite discouraging to the reader looking for a definitive model of *Homo Moralis*: according to some accounts, morality is all about reasoning through a problem and working out the implications of various possible courses of action (e.g., Kohlberg, 1969); according to others, morality is mostly a reaction to gut feelings that tell us something is right or wrong (e.g., Haidt, 2001; Prinz, 2006). Not only is there a fairly clean split

on the emphasis that each model places on reason versus emotion, but the types of experimental situations used to elicit moral judgments across experiments are even more variable: some experimenters [most famously Kohlberg (1969), but also Rest (1986), and other neo-Kohlbergians] ask participants to resolve dilemmas where different moral principles collide; others (e.g., Haidt, Koller, & Dias, 1993) ask participants to act as observers and approve or disapprove of the offending behavior of others; still others locate themselves outside of the reason vs. emotion debate, and yet study situations that would sound morally relevant to many readers, such as how humans succumb to temptation or resist immediate gratification for a greater future good. (e.g. Giner-Sorolla, 2001; Baumeister & Exline, 1999).

In fact, these variations in methodology may offer an important clue as to why the models of moral judgment differ so radically in their emphasis on reason versus emotion. The different models of morality that have appeared in the literature over the years may be a direct consequence of the different moral situations considered by the researchers who have proposed them: observe humans as they try to solve complex moral dilemmas, and you are likely to propose a model of morality that relies heavily on high-level reasoning; ask them how they feel about disgusting immoral acts, and you are likely to conclude that morality is all about gut reactions that require little rational deliberation. The relative emphasis on reason versus emotion then becomes largely determined by the prototypical moral situation under study. To the extent that people encounter all of these situations in the course of their daily lives – sometimes they have to make complex personal moral choices, sometimes they witness the shocking behavior of others – the different models of moral judgment all approximate the truth of the matter, but an understanding of the various situations that give rise to moral judgment becomes paramount.

In essence, we propose that the best way to get beyond apparent clash between rationalists and emotionalists and to reconcile these competing traditions is to develop a typology of the moral situations that give rise to different judgmental processes. Although it may sound like we wish to propose a dichotomy between situations leading to emotionalism and situations leading to rationalism (thus replacing one dichotomy with another), our purpose is broader. These two general situations are not the only ones used in the study of moral judgment. We will present four such prototypical moral situations, that, when taken in isolation, paint a very different picture of what moral life is, and of the relationship between reason and emotion.

Prototypes of Moral Situations

Moralists, like most scholars, love typologies, lists and catalogues. From the Ten Commandments of the Pentateuch to the Seven Deadly Sins of the Christian tradition, from the six stages of moral development to six links in the social intuitionist model, taxonomies provide helpful categories to decode the ambiguity of everyday life and circumscribe the domain of morality. We don't pretend to provide such comfort here. Our categories are tentative, and are meant as an explanatory companion for the reader of moral psychology confused by the multiplicity of perspectives. At least four types of moral situations are evident in research conducted across various areas of the psychological literature on morality (see Table 1). In the first prototypical situation, an individual reacts to a moral infraction. A focus on this situation (which we'll call a *moral reaction*) leads to a view of morality as governed by emotional impact and quick intuitions. The latter three place a greater emphasis on decision-making and on predicting individual moral choices. In the *moral dilemma* tradition, investigators ask participants to articulate how they might resolve the tension between two incompatible moral demands, and end up with a view of morality based on verbalized reason. Traditionally outside

of the morality literature, situations of *moral weakness* capture knowing the right thing to do but not having the willpower to carry it through – focusing on these paints a view of morality centered on ego strength. Finally, in the *moral fortitude* situation we include all cases where reason needs to override an initial moral opposition (e.g., telling on a friend whom you’ve caught cheating despite your initial reluctance) or needs to call emotion to its aid (e.g., bringing to mind outrageous cases of abuse to facilitate reporting a bully), and it leads to a view of morality where emotion abounds but reason is firmly at the helm. Although the first prototypical situation (moral reaction) predominantly focuses on the behavior of others, whereas the other three center more on one’s own decisions, there are enough exceptions to this actor/observer pattern for us to avoid including it into our analysis – though we will discuss this issue when relevant. We now present each of these prototypical situations in greater detail.

Moral reactions: Judging the Behavior of Others

One view of morality is that it is about judging others. The prototypical moral situation in this model is witnessing another individual commit a potentially offensive behavior. The focus of morality is on how that behavior will be judged and what inference will be drawn about the perpetrator. This approach to morality is grounded in the social psychological tradition of person perception and causal attribution, and has most recently been defended in the social intuitionist model of moral judgment (Haidt, 2001). Moral judgments, in this approach, are “evaluations (good vs. bad) of the actions or character of a person that are made with respect to a set of virtues held to be obligatory by a culture or subculture” (Haidt, 2001, p.817). The social intuitionist model posits that moral judgments are primarily based on moral intuitions, which are, in turn, defined as “the sudden appearance in consciousness of a moral judgment, including an affective valence (good-bad, like-dislike), without any conscious awareness of having gone through steps

of searching, weighing evidence, or inferring a conclusion” (p.818). Like Justice Potter Stewart’s definition of obscenity, a moral act is judged to be right or wrong because you just “know it when you see it.” As mentioned above, this approach provides a valuable integration between the traditional study of moral judgment and recent advances in the study of emotion, implicit processes and motivated cognition in social psychology.

We refer to this class of situations as moral reactions to retain the broader use of the term moral judgment common in the literature. Moral reaction approaches emphasize that emotions are squarely at the center of morality. For instance, despite the integration of reasoning into the social intuitionist model (Haidt, 2001), the emphasis of the paper from its title (“The emotional dog...”) to its last sentence (“moral emotions and intuitions drive moral reasoning”) is that moral psychology has radically underestimated the primacy of emotion in moral judgment. Work stemming from this approach, which has examined such varying areas as cross-cultural judgments (Haidt, Koller, & Dias, 1993; Rozin, Lowery, Imada, & Haidt, 1999), moral emotions (Haidt, 2002), and neurological processes (Greene & Haidt, 2002) all converge on this same claim, namely that “emotions are in fact in charge of the temple of morality” (Haidt, 2002). The social intuitionist model is, at heart, squarely in the emotionalist camp. A similar perspective is reflected in the work using “moral outrage” as a predictor of condemnation (e.g., Tetlock, Kristel, Elson, Green, & Lerner, 2000) or punishment (e.g., Carlsmith, Darley, & Robinson, 2002; Kahneman & Frederick, 2002). Tetlock et al. explicitly describe the affective component of moral outrage as “anger, contempt, and even disgust toward violators” (p.855).

This view of the moral agent as an observer lends itself well to the emerging methodology of neuroimaging, as participants can be presented with vignettes or images while their brain activity is recorded. This is the approach taken by Moll and others (Moll et al., 2001,

2002a, 2002b). For example, Moll, Oliveira-Souza, Eslinger, Bramati, Mourão-Miranda, Andreiuolo and Pessoa (2002b) scanned Brazilian subjects while they were looking at “moral pictures portraying emotionally charged, unpleasant social scenes, representing moral violations (e.g., physical assaults, poor children abandoned on the street, war scenes)” (p.2731) – mostly derived from the International Affective Picture System (IAPS; Lang et al., 1995). When reactions to these moral pictures were contrasted to reactions to non-moral, but unpleasant pictures (e.g., body lesions, dangerous animals, bodily products), Moll et al. found greater activation for the moral pictures of “critical elements of a cortical-limbic network that enables humans to link emotional experience to moral appraisal” (p.2736).¹

One source of ambiguity in this literature is whether intuitions should be equated with emotions. Haidt is often careful to distinguish the two, defining intuition as a form of cognition (e.g., Haidt, 2001), but also sometimes describing intuitions as “affect-laden,” or as “quick, automatic affective reactions” (Greene & Haidt, 2002, p.517). A natural question, therefore, is whether there can be such a thing as a non-affective intuition. In other words, are emotions (or at least affect) necessary for moral judgment? Sunstein (2005) provides an elegant review of the many mental shortcuts or “moral heuristics” that we rely on when making moral judgments, some of which have an affective component (e.g., the outrage heuristic), while many others seem to rely more on basing moral reasoning on a number of simple schemas or maxims. Examples of such heuristics or maxims include “People should not be permitted to engage in moral wrongdoing for a fee” or “Punish, and do not reward, betrayals of trust.” Sunstein argues that errors can occur as the result of the mindless application of these maxims. This is what makes them moral heuristics: they work most of the time, but can lead one astray, as when the “wrongdoing for a fee” heuristic above erodes public support for emissions trading policies (in

which industries are allowed to buy out of reducing toxic emissions), which Sunstein argues is one of the best ways to reduce further ecological damage. Sunstein's moral heuristics are a rare candidate of non-emotional moral intuition in the literature, but his model shares with others its emphasis on quick, unreasoned reactions.

There is thus considerable evidence that when reacting to the behavior of others, we rarely rely on thoughtful deliberation. This is consistent with one understanding of how social emotions such as anger may have evolved. Frank (1988), for instance, describes emotions as serving a "pre-commitment" function. In this framework, the threat of an emotional reaction prevents wrongdoers from harming or cheating others in the first place, precisely because, being emotional, retaliation is supposed to be automatic and not appeasable by reason. Not unlike the "doomsday machine" theory developed by nuclear strategists during the Cold War, the deterrent power of emotions is alleged to be their inexorability once set in motion. The emergence of an emotional system that guarantees a strong, swift emotional reaction, which in turn leads to the punishment of perpetrators (such as "cheaters"; Tooby & Cosmides, 1990), has a strong chance of being passed on to offspring because of the protection it provides.

We have arrived at a first consistent picture of moral judgment. However, this approach to morality is built around experimental evidence that gauges our reactions to the infractions of others. If we restrict the domain of morality to those instances in which we judge others, we are likely to conclude that morality is based on quick, affect-laden responses. But a very different view of moral judgment emerges when we consider other sorts of moral encounters, and it is to these that we now turn. Most notably, if the perspective shifts away from the judgment of others to the analysis of an actor's own choices, one is likely to conclude something very different about the nature of moral judgment.

Moral Dilemmas: When Principles Clash

When we think about moral reasoning, what often comes to mind is the traditional moral dilemma: deciding between two morally right but incompatible courses of action. For example, reconciling conflicting demands on one's loyalties, *Sophie's choice* situations, and tragic trade-offs (Tetlock, Kristel, Elson, Green, & Lerner, 2000) are all instances in which no option is satisfactory because both alternatives have a moral justification. These moral dilemmas have captured the imagination of philosophers for centuries, and the most popular moral brain-teasers rely precisely on the unresolved tension inherent to these examples. Perhaps unsurprisingly, Kohlberg's study of the cognitive development of morality (1969) started with just such dilemmas, refined over the years into the Standard Issue Moral Judgment Interview (Colby, Kohlberg & Kauffman, 1987). His explicit goal was to discover how the development of reason influenced moral judgment, and indeed think-aloud protocols and in-depth interviews soon revealed that people could engage in sophisticated reasoning about morality, weigh pros and cons, and reveal stable cognitive mindsets in the way they approached moral dilemmas: While some individuals took into account mostly fear of punishment or rejection (pre-conventional stages), others embraced the rules of society as inherently worthy of respect (conventional stages), and a few seemed to consider what they believed were universal principles and followed them even when they clashed with those of society (post-conventional stages). Despite possible differences in stages of reasoning, these individuals had one thing in common: Their decision seemed based on conscious thought processes that could be articulated. In fact, the emphasis of this approach was not so much on the decision that participants eventually reached as it was on the accounts they gave of how they arrived at their particular decision².



Rationalists enjoy the moral dilemma approach because of the reasoning these ambiguous dilemmas elicit. Take a metaphor from visual perception: with most straightforward images, our experience is one of immediate access to the world out there, and it's hard to believe much construction is involved. But with well-crafted ambiguous images (like the oft-used picture of a woman who can be seen as young or old, after Boring, 1930, see Figure 1), we catch ourselves going back and forth between the two perceptions, explicitly interpreting the different part of the picture (“there’s the mouth, there’s the nose...”) in a process that is much more self-aware and apparently reasoned than ordinary perception. The elegant dilemmas designed by philosophers and used by moral psychologists of the cognitive tradition are not unlike these ambiguous pictures – because they are designed to prevent the sort of swift judgment that occurs when we are judging others, they elicit deliberative reasoning.

As we’ve alluded to before, another orienting distinction (though not a rigid one) between the moral dilemma situation and the moral reaction situation described in the previous section is one of perspective. The dilemmas typically used in the current tradition (Kohlberg, 1969; Colby, Kohlberg & Kauffman, 1987; Rest’s Defining Issues Test, 1986), while sometimes third-person at first glance (most famously the Heinz dilemma) are always designed to yield a fair amount of vacillation, and the participant must commit herself to a response by prescribing what should be done and justifying it. Respondents are therefore required to take the perspective of the actor in the situation, whereas “dilemmas” in the moral reaction tradition are really opportunities to condemn a behavior (e.g., “Is it appropriate for you to throw your baby in the dumpster in order to move on with your life?” in Greene, Sommerville, Nystrom, Darley & Cohen, 2001). The

complexity of scenarios in the social dilemma situation not only stimulates reasoning, but draws participants into the situation more than the typical moral reaction scenarios. To contrast these two approaches, when judging the behavior of others, we often use knee-jerk reactions and gut feelings, whereas when deciding what the right course of action should be for our own life, we are more circumspect and mobilize our cognitive resources (if the stakes are high enough) to bring to bear the heavy machinery of moral reasoning.

Moral Weakness: Failures of Self-Control

One of the most perplexing puzzles for Greek philosophers was how an individual could do something she did not want to do. For example, why do I eat the fattening cookie when I do not want to break my diet? Why engage in an illicit affair despite my strong desire to stay faithful? This failure is common enough that the Greeks had a name for it: *Akrasia*, incontinence, or weakness of the will. In this tradition, emotions are conceptualized as passions, and to be human means to rise above these passions and to control them for the sake of higher moral goals. The role of cognition is to squash the passions in the service of reason. This dualistic opposition harks back to the Greeks too: Socrates famously conceptualized passion and reason as two stallions pulling the same chariot in often diverging directions. In the Christian tradition, the soul had to contend with an earthly body that made inappropriate demands, in part because the devil knew how to use emotions to tempt humans into sin. A glance at the seven deadly sins reveals that they are not acts, but impulses of the passions, such as gluttony, lust, sloth and the like. And in the last century, Freud's structural model (1933) depicted these passions as the primordial urges of the Id, and believed that the primary role of the Superego was to prevent the expression of all of the id's impulses.

Upon reflection, it seems that maybe more than lofty moral dilemmas, challenges of self-control do constitute the stuff of our everyday moral life—from resisting addictions to maintaining a diet; from overcoming anger and staying calm with a rambunctious child to resisting the temptation to cut corners in our professional life because of greed or ambition; from turning down extramarital sexual favors to supporting a friend whose depression has become alienating. In a world that is seen as filled with passion and temptation, the primary moral goal is to resist them, and a moral psychologist focusing on these moral situations will come up with a model of *Homo Moralis* quite different from the ones presented in the preceding sections.

In fact, though not typically squarely within the realm of moral psychology, a fair amount of research on self-control within social psychology can illuminate this prototypical moral situation. For example, in all these examples above, a self-interested, emotional first response has to be resisted in order for morality to prevail. How do people do it? Walter Mischel, in his seminal work on delay of gratification, asked children to sit in front of an attractive snack that they could eat if they only waited for a few minutes. If waiting was too hard, though, they could ring a bell and get half of the snack, foregoing the other half in favor of instant gratification (Mischel & Ebbesen, 1970; Mischel, Shoda & Rodriguez, 1989). Mischel and colleagues described the various cognitive techniques employed by children, most having to do with re-allocating attention away from the reward (looking around, humming, sitting away ...). Although Mischel's findings reach beyond morality, the phenomenology of delay of gratification and the techniques used have great relevance in the case of moral control. Roger Giner-Sorolla (2001) emphasized the role of affective attitudes in dilemmas of self-control, and showed how many of these can be reduced to the “one in the hand vs. two in the bush” logic captured by Mischel's paradigm. Giner-Sorolla describes guilty pleasures as situations yielding immediate reward and

greater later cost (e.g., sexual promiscuity) and grim necessities as situations requiring immediate cost for the promise of a later reward (e.g., studying). Again, although some of Giner-Sorolla's examples go beyond the traditional domain of morality, there is much for moral psychologists to glean from this tradition once self-control is included within the realm of moral situations.

Sometimes it seems that it matters less whether we have the cognitive skills to overcome passions than whether we have the energy and motivation to do so. One may have every intention not to spank a child, but in the heat of the moment, with the stress of a demanding job and the exhaustion of a long week, a blow is dealt before one can think twice. Or a temptation is resisted effectively until an unexpected personal downturn lowers one's defenses, and one falls into relapse, corruption or adultery. Thus the focus of dilemmas of self-control is once more how reason can dominate emotions, with emotions pulling down and reason pulling up. One influential approach (Baumeister, Bratlavsky, Muraven & Tice, 1998) has investigated the limits of self-control, demonstrating that self-control is not unlike a muscle—if it becomes depleted, subsequent self-control becomes much harder. Some of the most intriguing findings from this work on ego depletion suggest that when self-control is exerted in one domain, it becomes depleted such that later performance in an entirely different domain is likely to exhibit self-control failures. But, in keeping with the muscle metaphor, Baumeister and Exline (1999) contend that the will becomes stronger as it is exercised. Again, their model encompasses more than the moral domain, but their findings add an important element to our understanding of moral situations where individuals struggle to adhere to their moral beliefs because of the temptation of immediate satisfaction. This important and common moral predicament has,

unfortunately, been underplayed by previous models of morality. As such, we know less about the role of self-control in everyday moral judgment than we probably should.

Moral Fortitude: Using Emotions in the Service of Reason

We call our last situation *moral fortitude* to capture the paradigmatic case where individuals have the immediate knee-jerk reaction that a course of action is immoral but, upon reflection, realize that this action nevertheless needs to be taken in the service of a greater moral goal. An investigator of this type of situation would likely conclude that morality is best described as a struggle between various emotions, with reason acting as the ultimate arbiter. For instance, Greene, Nystrom, Engell, Darley, and Cohen (2004) recently posited the importance of cognitive conflict and control in moral judgment. The paradigmatic example that they present is one where you have to smother your own baby to death to prevent enemy soldiers from discovering you and other villagers. Either way the child dies, but if you kill him before he cries, you and the villagers will live. They found that participants who took a long time to respond to dilemmas but ultimately gave the utilitarian response (e.g., kill the baby) showed greater activation of areas typically associated with mental control. Greene et al. intentionally picked dilemmas that directly pitted consequentialism (which favors saving more lives) against deontology (for which pragmatic justifications are often irrelevant), and their finding that mental control is involved is of great import. The mistake would be to conclude from their work that this is how all morality works, and that reason is always in the business of moderating moral intuitions. What comes into play in these prototypical situations is most certainly an important part of the puzzle. But as before, we cannot rely on only one type of moral encounter to arrive at an accurate portrayal of *Homo Moralis*.

There is a long tradition of research in social psychology describing the processes people engage in to “quiet down” their moral intuitions (intuitions of this sort are typically referred to as “scruples” or “conscience”). Bandura’s work on moral disengagement (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996) presents an elaborate model of the way people manage to do things that they would initially be uncomfortable doing, by either redefining the situation to remove morality from the equation, or by justifying the violation as a small one in the service of a greater good. Like a Frenchman learning to ignore his initial disgust for a smelly cheese or a surgeon learning to get over her inhibition for cutting the flesh of another human being, soldiers, executioners, and jurors all find ways to get over their initial moral intuitions in the service of a what they perceive as the greater good. Whereas moral reaction situations seemed to rely on “gut feeling” (i.e., affect), here colloquial parlance would speak of “having the guts” (i.e., overcoming affect) to do the right thing (other medical metaphors include “biting the bullet” or swallowing a “bitter pill”). Of course, research also depicts the darker side of this ability, in which moral disengagement leads to some of the worst horrors perpetrated by Humankind. The insight here, however, is that if humans were guided solely by the sort of immediate intuitions described by emotionalist approaches, it is unlikely that we would have accomplished some of our best (and some of our worst) moral acts. Reason, by acting as arbiter, can put emotions at the service of the human imagination, with all its beautiful and dreadful consequences (Pizarro, Detweiler-Bedell, & Bloom, 2006). Two processes in particular demonstrate the tools at the disposal of reason when it needs to override emotions: appraisal and regulation.

Appraisal. Emotions most likely evolved as quick responses to solve specific environmental problems, but these responses depend greatly on our goals and the manner in which we appraise our current environment and situation (Lazarus, 1991). For instance, when we

perceive that events are consistent with the attainment of our goals, we tend to experience happiness, whereas if we perceive that a goal is threatened, we experience fear or anger. And when we perceive that a goal has failed irrevocably, we tend to experience sadness. Consistent with this approach, there is a large body of evidence demonstrating that emotions vary greatly depending on our appraisals of events (e.g., Ellsworth & Scherer, 2003; Frijda, 1987; Oatley & Johnson-Laird, 1987; Ortony, Collins, & Clore, 1988; Roseman, Antoniou, & Jose, 1996; Scherer, 1998, 2003; Smith & Lazarus, 1993; Stein & Levine, 1987, 1990; Stein, Trabasso, & Liwag, 2000; Weiner, 1985). Evidence from this appraisal approach lends support to the power of reason—our emotions vary greatly depending on the sorts of thoughts that we bring to any given situation. So, while the presence of a bear may cause intense fear if we are out camping, it may lead only to mild amusement if we are at a circus. Dandoy and Goldstein (1990) demonstrated that participants who adopted a detached, analytical attitude while viewing films of factory accidents experienced less physiological distress compared to participants who had received no such instructions. Thus our emotions are not purely at the mercy of our environment, and we can modulate our affective reactions some by changing our outlook.

Such cognitive flexibility is also evident in the ease with which emotions can shift depending on the attributions we make about an individual's behavior. For example, our anger that a student failed to show up for an exam turns to sympathy if we discover that cause of the absence was a death in the family (Betancourt, 1990). And one of the most robust findings from the study of empathy is that by simply shifting perspectives to take the perspective of another, individuals become much more empathetic, and this in turn changes their moral judgments and behavior (e.g., Batson, Dyck, Brandt, Batson, Powell, McMaster & Griffit, 1988). Even simply

shifting one's appraisal of another individual as being similar to you can change your empathy towards him (Batson, Turk, Shaw & Klein, 1995).

While there is some disagreement over the contention that appraisals are necessarily conscious judgments (e.g., Lazarus, 1991; Zajonc, 1980), the fact that appraisals *can* be conscious is fairly non-contentious at this point. That appraisals can be unconscious is most likely true as well, and these non-conscious appraisals would certainly serve as a boundary condition for the power of reason.

Regulation. The cognitive control we have over our emotional responses is further evident in our ability to regulate our emotional reactions. While emotions were once seen as capricious influences that are passively experienced (hence the term "passion"), in many ways the biggest discovery in the modern science of emotion is the degree to which emotion and reason are interrelated. We are able to use our emotions to service our judgments or goals in a variety of manners. Gross (1999) demonstrated that by re-appraising stimuli or by selecting the situations we are exposed to, we are effectively able to pre-empt emotional responses that might have otherwise occurred. For instance, when individuals are viewing disgusting films, asking them to think of the films in unemotional terms can dramatically reduce their emotional response (Ochsner, Bunge, Gross & Gabrieli, 2002). And at a very basic level, if I am prone to getting mad at a certain person, I can avoid that person and thus avoid feeling anger. The various regulatory strategies that are available to us can be used in the service of previously decided goals, desires, and intentions.

This is true for our moral goals as well. Certain emotions seem to lend themselves nicely to the service of energizing moral goals. As an example, Rozin and others (Rozin, Markwith, & Stoess, 1997) have demonstrated the power of disgust in shaping moral opinions and attitudes.

According to Rozin, issues that were previously non-moral often come to possess moral status through the recruitment of disgust (a process he labels “moralization”; Rozin, 1999). In support of this view, Rozin et al. (1997) showed that vegetarians that abstain from meat for moral reasons are more likely to exhibit disgust in the presence of meat than vegetarians who are so for non-moral (i.e., health) reasons, while Rozin & Singh (1999) showed a similar pattern in the moralization of cigarette smoking. They present these findings as evidence of the power of disgust on our thinking about moral issues. It is likely that a cool-headed decision to avoid meat can be served by recruiting consistent emotions through a variety of tactics. A glance at the PETA (People for the Ethical Treatment of Animals) website illustrates how disgust is commonly used in the hope of strengthening an ethical argument.

The ability to override initial knee-jerk reactions and even to use emotion in the service of reason casts doubt on the strongest contentions of the emotionalist approach—that morality is mainly governed by quick affect-laden reactions. Our first reaction might be emotional (Zajonc, 1980), but that doesn’t mean it cannot be overcome. And if, as we have been arguing, investigators focus on such cases where some emotions and intuitions need to be “quieted down,” they are likely to conclude that morality is all about overcoming these initial reactions.

How is one to be virtuous?

The philosopher, the sheriff, the monk, and the cognitive wrestler

Taking into account the sorts of moral encounters that are considered across different theoretical approaches not only elucidates the relative contribution of emotion and reason in moral judgment, but it also provides us with four very different models of what it means to be moral, suggesting different archetypes of the virtuous person. While some models emphasize the

virtues of reason and others emphasize emotions, some focus on the struggle between the two. Here we present four different portraits of the virtuous person (four paragons of virtue) as characterized by different relations between reason and emotion in moral judgment.

The philosopher. In this (traditional) view, to be virtuous is to think clearly about morality, especially in the type of moral dilemmas described above. Life's gray areas make it difficult to simply hold on to a set of predetermined abstract principles, so interpreting and applying them to everyday life is the challenge that must be met (Batson, Kobrynowicz, Dinnerstein, Kampf & Wilson, 1997): The devil is in the details. Like the U.S. Supreme Court interpreting the constitution, the virtuous person has the ability to live a decent, consistent life by utilizing reason when deciding upon her own actions as well as when judging the actions of others. Philosophical training is, in this view, the clear path to virtue. Kohlberg's view best exemplifies this, as in the highest stages of moral development (the postconventional stages 5 and 6), the virtuous individual engages in sophisticated moral reasoning about universal moral principles, and applies them to everyday judgment and decision-making. Reason reigns supreme on this view, and emotions should be epiphenomenal at best and intrusive at worst.

The sheriff. According to emotionalist approaches such as the social intuitionist model, moral life (especially, as we have argued above, if it is defined as judging others) is governed primarily by quick flashes of affect-laden approval or disapproval, and virtue would result from these flashes being timely and appropriate. "A virtuous person," write Haidt & Joseph (2004, p.61), "is one who has the proper automatic reactions to ethically relevant events and states of affair." We call this model of virtue the sheriff in reference to the celebrated lawmakers of the old American West who would shoot first and ask questions later, and in a pinch had to trust their instincts to make quick, accurate decisions. For the rest of us, these intuitions, according to

Haidt (2001), are primarily of evolutionary (Lieberman, this volume) and cultural origin, though intuitions can be shaped by reason, especially through social persuasion (Link 4 in Haidt's 2001 model), reasoned judgment (Link 5) and private reflection (Link 6). Because the reasoned links are posited to occur much less frequently (and mostly for philosophers), it would seem that the virtuous individual would be one who is attuned to her primal, gut feelings as well as to her culture's mores. Focusing on one's feelings of compassion can lead to overweighing the needs of those physically closer at the expense of distant suffering others (Singer, 1995). Cultural mores also have their pitfalls, as when moral emotions of disgust and contempt are put to the service of a racist ideology (Haidt & Joseph, 2004, p.63). Given these problems, a normative theory of what the *proper* automatic reactions should be is still necessary, but the emphasis of this view is that virtue is all about having the right intuitions.

The monk. If one sees morality as a struggle to uphold principles (and not be morally weak), the virtuous individual must fight the passions because they will inevitably lead to his downfall. Asceticism, discipline and self-control are the name of the moral game. By keeping in mind long-term lofty benefits over short-term gratifications (Giner-Sorolla, 2001), the virtuous individual develops the ego control (Baumeister et al. , 1998; Baumeister & Exline, 1999) required to follow simple edicts and lead a virtuous life. The metaphor of the *monk* captures this, as exemplified by the strict rules of Christian monastic orders (e.g., Benedictines) which left few aspects of life unregulated. The monk's role was merely to obey and train himself to banish earthly passions. While this view has been traditionally associated with the banishment of all emotions, recent focus on positive emotions like awe and elevation (Haidt, 2002; Keltner & Haidt, 2003) suggest that there may be emotional components associated with the virtuous life, and that it may be simplistic to see monastic life as a rejection of all emotions.

The cognitive wrestler. This last view of the virtuous person is the most complex, as it takes elements from the previous views of virtue to form a composite of what the virtuous individual should be, especially in cases that we have defined as requiring moral fortitude. This view acknowledges the role of emotions, but gives a primary role to reasoning in channeling, reshaping, or overriding these emotions. This is the view of the virtuous man embedded in Haidt's (2001) reasoning links, as well as defended by Pizarro and Bloom (2003). In this view, cognition should oversee emotions in order to resist "base" appeals (as does the monk above), but also to overcome the pitfalls and biases of knee-jerk moral reactions (that plague the sheriff described above), but unlike the philosopher, this model of virtue can tame and juggle emotions, recognizing when an emotion is a valid input and when it should be kept in check. We call it the *cognitive wrestler* (in jesting reference to Fiske and Taylor's 1984 "cognitive miser" and Bargh's 1999 "cognitive monster") to illustrate a cognitive system wrestling with emotions to put them to good use, using also the metaphor of a wrestler channeling his anger to serve his long-term goals of winning a fight. Greene et al. (2004) have offered a version of this view, and present evidence in the form of reaction time or activation of areas associated with cognitive conflict to document the internal struggles between emotion and reason. This view acknowledges the role of emotions, but unlike the monk, doesn't conceptualize emotions as entirely polluting to the pursuit of a virtuous life. Rather, emotions can be recruited by reason to serve higher goals, and people can train themselves to eventually exhibit the "proper" automatic reactions that will ensure that they remain on the straight path toward virtue.

Conclusion

We began this chapter by presenting a debate with a long history—that of the role of reason and emotion in moral judgment. Rather than offering a solution to the debate about how

individuals make moral judgments, we have argued that our understanding of the relationship of reason and emotion in this domain has been shaped by the sorts of situations researchers have investigated in their experiments. Emotionalist approaches tend to favor one type of moral situation (reactions to infractions) while rationalists favor another (moral dilemmas). These investigations tend to yield answers consistent with the theoretical approach of the researcher. We have tried to outline at least four different paradigmatic moral encounters, and have argued that focusing on only one encounter at the expense of others can lead to a radically different understanding of the relationship between emotion and reason, and in turn lead to a different understanding of how moral judgment works.

Do emotions help or hurt moral decision making? As we hope to have demonstrated, psychologists have disagreed on the role of emotions in moral judgment – some seeing emotions as irrelevant at best, intrusive at worst, and others seeing emotions are the root of all moral judgments. Providing an answer to the question that defines this book requires that one understands the place of emotion in moral judgment. At the end of our analysis, it is apparent that, as often, the answer is that it depends, and we believe that there is more to be gained by understanding how they can sometimes help and how they can sometimes hurt than by forcing a definitive answer to a question that is voluntarily challenging, but possibly reductionistic: The answer appears to be more interesting than the question allows for. Emotions can help when they lead to quick and proper condemnation of a moral violation (moral reaction), orient us to the correct course of action (moral dilemma), hold a promise that is worth working towards (moral weakness), or even trump another emotion in service of the greater good (moral fortitude) – but they can also hurt when they lead to excessive or inappropriate condemnation (moral reaction), when they cloud our ability to think clearly based on abstract values (moral dilemmas), when

their lure prevents us from implementing higher goals (moral weakness), or even when they lead to a naïve moral impulse that prevents the implementation of a superior moral action (moral fortitude). As all these examples reveal, the answer may not be straightforward, but ignoring emotions in the study of moral judgment would be a glaring oversight.

The four prototypes presented here, while meant to be merely descriptive, also paint different portraits of what it might mean to be moral or virtuous, and thus yield diverging prescriptive agendas. This last step of offering different paragons of virtue might immediately arouse suspicion among moral psychologists who are always careful to avoid making normative claims. What *is*, after all, has no bearing on what *ought* to be. But we agree with Waterman (1988) who, in his piece on the uses of psychological theory and research in the process of ethical inquiry, delineated what might be within the reach of moral psychologists wary of making normative claims based on the descriptive tools of science. Waterman argued that while we have to leave the evaluation of the ultimate causes or consequences of behavior to our philosopher colleagues, this does not mean that we cannot test the various models of how these behaviors come about, or the descriptive assumptions made by various philosophical approaches. Ought, after all, implies *can*. And a normative theory of morality must be informed about the constraints of human psychology. So while evaluating such concepts as “proper automatic reactions” (Haidt & Joseph, 2004) for example, we are poorly equipped to determine if they really are proper, but superbly equipped to test whether they are automatic. And this piece of empirical information can lead to very different accounts of what it means to be virtuous.

When taking these various approaches to the study of moral judgment into account, it seems that the best description of *Homo Moral*is is that of a cognitive wrestler. In the medieval world, morality was often seen as resisting inner demons, so the virtuous monk reigned supreme.

The Enlightenment, on the other hand, provided a rationalist view of sin as flawed and immature reasoning, and held the virtuous philosopher as the moral exemplar. Recent advances in the study of moral judgment have painted morality as a scuffle between quick affect-laden intuitions and reasoned deliberation that can respond to these impulses intelligently, and even shape them for the future. This can be characterized as a cognitive wrestler, taking each influence into account in a constant struggle to be virtuous. Wrestling, of course, can be a tag-team sport: The goal of the virtuous individual, then, is to stay in tune to the inner voices of emotion and intuition, trust her intuitions like the sheriff, use her reason like the philosopher to apply principles and guide action, and use the willpower of the monk in the struggle to override intuitions and emotions that may lead her astray.

Table 1. Four prototypical moral situations found in moral psychology.

Prototypical moral situation	Elements	Goal	Paragon of virtue
Moral reactions	Emotions (morality)	To condemn or praise	Sheriff
Moral dilemmas	Reason (morality) vs. Reason (morality)	To know what should be done	Philosopher
Moral weakness	Reason (morality) vs. Emotion (immorality)	To resist temptation	Monk
Moral fortitude	Reason (morality) vs. Emotion (morality)	To carry out what you know ought to be done	Cognitive Wrestler

References

- Ayer, A.J., 1952 (first Dover edition), *Language, Truth and Logic*. New York: Dover Publications.
- Bandura, A., Barbaranelli, C., Caprara, G., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology, 71*, 364-374.
- Bargh, J. A. (1999). The cognitive monster: The case against the controllability of automatic stereotype effects. In S. Chaiken & Y. Trope (Eds.), *Dual process theories in social psychology* (pp. 361–382). New York: Guilford.
- Bargh, J.A. (1994). The four horsemen of automaticity: Awareness, intention, efficiency, and control in social cognition. In R.S. Wyer, Jr. & T.K. Srull (Eds.), *Handbook of social cognition* (Vol. 1, pp.1-40). Hillsdale, NJ: Erlbaum.
- Batson, C. D., Dyck, J. L., Brandt, J. R., Batson, J. G., Powell, A. L., McMaster, M. R., & Griffit, C. (1988). Five studies testing two new egoistic alternatives to the empathy–altruism hypothesis. *Journal of Personality and Social Psychology, 55*, 52–77.
- Batson, C. D., Kobrynowicz, D., Dinnerstein, J. L., Kampf, H. C., & Wilson, A. D. (1997). In a Very Different Voice: Unmasking Moral Hypocrisy. *Journal of Personality and Social Psychology, 72*(6), 1335-1348.
- Batson, C.D., Turk, C.L., Shaw, L.L., & Klein, T.R. (1995). Information function of empathic emotion: Learning that we value other's welfare. *Journal of Personality and Social Psychology, 68*, 300-313.

- Baumeister, R.F., & Exline, J.J. (1999). Virtue, Personality, and Social Relations: Self-Control as the Moral Muscle. *Journal of Personality*, 67(6), 1165-1194.
- Baumeister, R.F., Bratslavsky, E., Muraven, M., & Tice, D.M. (1998). Ego depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74(5), 1252-1265.
- Betancourt, H. (1990). An attribution–empathy model of helping behavior: Behavioral intentions and judgments of help-giving. *Personality & Social Psychology Bulletin*, 16, 573–591.
- Bodenhausen, G. V., Sheppard, L., & Kramer, G. P. (1994). Negative affect and social perception: The differential impact of anger and sadness. *European Journal of Social Psychology*, 24, 45-62.
- Boring, E.G. (1930). A new ambiguous figure. *American Journal of Psychology*, 42, 109-116.
- Carlsmith, K.M., Darley, J.M., & Robinson, P.H. (2002). Why do we punish? Deterrence and just deserts as motives for punishment. *Journal of Personality and Social Psychology*, 83, 284-299.
- Colby, A., Kohlberg, L., & Kauffman, K. (1987). Instructions for moral judgment interviewing and scoring. In A. Colby and L. Kohlberg, *The measurement of moral judgment, Vol.1*. Cambridge, UK: Cambridge University Press.
- Dandoy, A. C., & Goldstein, A. G. (1990). The use of cognitive appraisal to reduce stress reactions: A replication. *Journal of Social Behavior & Personality*, 5, 1275–1285.

- Ellsworth, P. C., & Scherer, K. R. (2003). Appraisal processes in emotion. In R. J. Davidson, K. R. Scherer, and H. H. Goldsmith (Eds.), *Handbook of Affective Sciences* (pp. 572-595). New York: Oxford University Press.
- Fiske, S.T., & Taylor, S.E. (1984). *Social cognition* (1st ed.). Reading, MA: Addison-Wesley.
- Frank, R.H. (1988). *Passions within reason*. New York: W.W. Norton & co.
- Freud, S. (1933). *New introductory lectures in psychoanalysis*. New York: Norton.
- Frijda, N. H. (1987). Emotion, cognitive structure, and action tendency. *Cognition and Emotion, 1*, 115-143.
- Giner-Sorolla, R. (2001). Guilty pleasures and grim necessities: Affective attitudes in dilemmas of self-control. *Journal of Personality and Social Psychology, 80*(2), 206-221.
- Greene, J., & Haidt, J. (2002). How (and where) does moral judgment work? *Trends in cognitive sciences, 6*(12), 517-523.
- Greene, J.D., Nystrom, L.E., Engell, A.D., Darley, J.M., & Cohen, J.D. (2004). The neural bases of cognitive conflict and control in moral judgment. *Neuron, 44*, 389-400.
- Greene, J.D., Sommerville, R.B., Nystrom, L.E., Darley, J.M., & Cohen, J.D. (2001). An fMRI investigation of emotional engagement in moral judgment. *Science, 293*, 2105-2108.
- Greenwald, A.G., & Banaji, M.R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review, 102*, 4-27.

- Gross, J.J. (1999). Emotion regulation: Past, present, future. *Cognition and Emotion*, 13, 551-573.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814-834.
- Haidt, J. (2002). The moral emotions. In R.J. Davidson, K.R. Scherer, & H.H. Goldsmith (Eds.), *Handbook of affective sciences*. Oxford University Press, Oxford, 852-870.
- Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Dædalus*, Fall issue, 55-66.
- Haidt, J., Koller, S.H., & Dias, M.G. (1993). Affect, culture and morality, or Is it wrong to eat your dog? *Journal of Personality and Social Psychology*, 65(4), 613-628.
- Hume, D. (1969/1777). *An enquiry concerning the principles of morals*. La Salle, IL: Open Court.
- Kagan, J. (1984). *The nature of the child*. New York, NY: Basic Books.
- Kahneman, D., & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin and D. Kahneman (Eds.) *Heuristics and Biases: The Psychology of Intuitive Judgment*. New York: Cambridge University Press, 49-81.
- Kant, I. (1959/1785). *Foundation of the metaphysics of morals*. (L.W. Beck, Trans.). Indianapolis, IN: Bobbs-Merrill.
- Keltner, D., & Haidt, J. (2003). Approaching awe, a moral, spiritual, and aesthetic emotion. *Cognition and Emotion*, 17, 297-314.
- 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, IL: Rand McNally.
- Lang, P.J., Bradley, M.M., Cuthbert, B.N. (1995). International affective picture system (IAPS). Bethesda, MD: national Institute of Mental Health Center for the Study of Emotion and Attention.
- Lazarus, R.S. (1991). *Emotion and adaptation*. London: Oxford University Press.
- Lerner, J., and Keltner, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology*, 81, 146–159.
- Mischel, W., & Ebbesen, E.B. (1970). Attention in delay of gratification. *Journal of Personality and Social Psychology*, 16, 239-337.
- Mischel, W., Shoda, Y., & Rodriguez, M.L. (1989). Delay of gratification in children. *Science*, 244, 933-938.
- Moll, J., Eslinger, P.J., Oliveira-Souza, R. (2001). Frontopolar and anterior temporal cortex activation in a moral judgment task: Preliminary functional MRI results in normal subjects. *Arq. Neuropsiquiatr.*, 59, 657-664.
- Moll, J., Oliveira-Souza, R., Bramati, I.E., & Grafman, J. (2002a). Functional networks in emotional moral and nonmoral social judgments. *Neuroimage*, 16, 696-703.
- Moll, J., Oliveira-Souza, R., Eslinger, P.J., Bramati, I.E., Mourão-Miranda, J., Andreiuolo, P.A., & Pessoa, L. (2002b). The neural correlates of moral sensitivity: A functional magnetic resonance imaging investigation of basic and moral emotions. *The Journal of Neuroscience*, 22(7), 2730-2736.
- Nisbett, R., & Wilson, T.D. (1977). Telling more than we know: Verbal reports on mental processes. *Psychological Review*, 84, 231-295.

- Oatley, K., & Johnson-Laird, P.N. (1987). Toward a cognitive theory of emotions. *Cognition and Emotion, 1*, 29-50.
- Ochsner, K.N., Bunge, S.A., Gross, J.J., & Gabrieli, J.D.E. (2002). Rethinking feelings: An fMRI study of the cognitive regulation of emotion. *Journal of Cognitive Neuroscience, 14*(8), 1215-1229.
- Ortony, A., Clore, G.L., & Collins, A. (1988). *The Cognitive Structure of Emotions*. Cambridge University Press, Cambridge.
- Piaget, J. (1932). *The moral judgment of the child*. New York: Harcourt, Brace Jovanovich.
- Pizarro, D.A. & Bloom, P. (2003). The intelligence of the moral intuitions: A comment on Haidt (2001). *Psychological Review, 110*, 193-196.
- Pizarro, D.A., Detweiler-Bedell, B., & Bloom, P. (2006). The Creativity of Everyday Moral Reasoning: Empathy, Disgust and Moral Persuasion. In J. Kaufman & J. Baer (Eds.) *Creativity, Knowledge, and Reason*. Cambridge University Press.
- Prinz, J. (2006). *The Emotional Construction of Morals*. Oxford: Oxford University Press.
- Rawls, J. (1999). *A theory of justice*. Harvard University Press, Cambridge, MA.
- Rest, J.R. (1986). *Moral development: Advances in research and theory*. Greenwood Publishing Group.
- Roseman, I. J., Antoniou, A. A., & Jose, P. E. (1996). Appraisal determinants of emotions: Constructing a more accurate and comprehensive theory. *Cognition and Emotion, 10*, 241-277.
- Rozin, P. & Singh, L. (1999). The moralization of cigarette smoking in the United States.

- Journal of Consumer Psychology*, 8, 339-342.
- Rozin, P. (1999). The process of moralization. *Psychological Science*, 10, 218-221.
- Rozin, P., Lowery, L., Imada, S., & Haidt, J. (1999). The CAD triad hypothesis: A mapping between the three moral emotions (contempt, anger, disgust) and the three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology*, 76(4), 574-586.
- Rozin, P., Markwith, M., & Stoess, C. (1997). Moralization and becoming a vegetarian: The transformation of preferences into values and the recruitment of disgust. *Psychological Science*, 8, 67-73.
- Scherer, K R. (2003). Introduction: Cognitive components of emotion. In R. J. Davidson, H. Goldsmith, K. R. Scherer (Eds.). *Handbook of the Affective Sciences* (pp. 563-571). New York and Oxford: Oxford University Press.
- Scherer, K. R. (1998). Appraisal theory. In T. Dalgleish & M. Power (Eds.), *Handbook of cognition and emotion* (pp. 637-664). Chichester: Wiley.
- Schwarz, N. & Clore, G.L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 45, 513-523
- Simon, H. (1967). Motivational and emotional controls of cognition. In H. Simon, *Models of thought* (pp. 29-38). New Haven, CT: Yale University Press.
- Singer, P. (1995). *How are we to live?* Amherst, NY: Prometheus Books.
- Smith, C.A., & Lazarus, R.S. (1993). Appraisal components, core relational themes, and the emotions. *Cognition and Emotion*, 7, 233-269.

- Stein, N.L., & Levine, L.J. (1987). Thinking about feelings: The development and organization of emotional knowledge. In R. E. Snow and M. Farr (Eds.), *Aptitude, learning, and instruction: Vol. 3. Cognition, conation and affect* (pp. 165-197). Hillsdale, N.J.: Erlbaum.
- Stein, N.L., Trabasso, T., & Liwag, M.D. (2000). A goal appraisal theory of emotional understanding: Implications for development and learning. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed.) (pp. 436-457). New York: Guilford Press.
- Stein, N.L., & Levine, L.J. (1990). Making sense out of emotion: The representation and use of goal-structured knowledge. In N.L. Stein, B. Leventhal, & T. Trabasso (Eds.), *Psychological and biological approaches to emotion* (pp. 45-73). Hillsdale, NJ: Erlbaum.
- Sunstein, C.R. (2005). Moral heuristics. *Behavior and Brain Sciences*, 28: 531-542.
- Tetlock, P.E., Kristel, O.V., Elson, S.B., Green, M.C., & Lerner, J.S. (2000). The psychology of the unthinkable: Taboo trade-offs, forbidden base-rates, and heretical counterfactuals. *Journal of Personality and Social Psychology*, 78(5), 853-870.
- Tooby J. and Cosmides L. (1990). The past explains the present: Emotional adaptations and the structure of ancestral environments. *Ethology and Sociobiology*, 11, 375-424.
- Waterman, A.S. (1988). On the use of psychological theory and research in the process of ethical inquiry. *Psychological Bulletin*, 103(3), 283-298.

Weiner, B. (1985). An attributional theory of achievement motivation and emotion.

Psychological Review, 92, 548-573.

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

Psychologist, 35, 151-175.

Footnotes

¹ Other neuroimaging studies that have asked participants to take the first-person perspective (e.g., Greene et al., 2001; Greene et al., 2004) have used scenarios so far removed from many respondents' own experience (e.g., "You are a fifteen-year-old girl who has become pregnant") that it is hard to believe that respondents truly abandoned an observer perspective. Furthermore, one behavioral option is often so despicable (e.g., discarding an unwanted newborn into a dumpster) that it is unclear whether respondents' affective reaction results from imagining being in that situation, or, more credibly, from hearing that someone would even consider such a gruesome act. One interpretation of these data is that participants were taking a third-person approach to the dilemmas, and that many of the "personal" dilemmas were gruesome enough (e.g., a man hiring someone to rape his wife so she would turn back to him for comfort) to yield an immediate emotional reaction without any real hesitation between the options proposed. Thus we see these studies as falling in our moral judgment category, and yielding a view of morality based on emotion (Greene et al., 2001), although we will see that later findings in this program of research also fit into the moral fortitude situation (Greene et al., 2004).

² The fact that reasoning can be studied in these cases, of course, does not prove that reasoning is causal, as Haidt (2001) points out. They may simply be a case of *post-hoc* rationalization. Needless to say, many of the emotionalist's evidence for the primacy of emotion suffers from the same problem—demonstrating the presence of emotion during a judgment is hardly sufficient support for the claim that emotion is causal.