

ISSN 1676-8965
RBSE 6 (17): 525-550
Agosto de 2007
ARTIGO

Emotions' as Moral Intuitions¹

Dacher Keltner
E.J. Horberg
Christopher Oveis

RESUMO: Com algumas exceções notáveis, os acadêmicos ignoraram em grande parte o papel das emoções no julgamento moral, que são julgamentos a respeito de assuntos como o certo, o errado e sobre a virtude. A tarefa deste artigo é rever as descobertas recentes a respeito de como emoções específicas figuram em julgamentos morais. Nossa proposta central é a de que emoções distintas tais como a compaixão, a aversão, a raiva, ou a gratidão, fornecem uma via crítica em avaliações sobre o certo e o errado. Examinamos estudos sobre os efeitos da emoção integral em cima do julgamento e da punição morais. Consideramos os efeitos da emoção incidental sobre o julgamento moral subjacente dos processos cognitivos, tal como percepções de intencionalidade ou dano, e os julgamentos morais sobre o certo e o errado em si mesmos. Pensamos, enfim, que esta análise da moralização ajuda a esclarecer as diferenças individuais e culturais no julgamento moral - ambos os fatos empíricos que têm provado ser árduos no estudo do julgamento moral.

PALAVRAS-CHAVE: Emoção; Julgamento Moral; Processo Cognitivo.

ABSTRACT: With a few notable exceptions, scholars have largely ignored the role of emotions in moral judgment, which are judgments concerning matters of right, wrong and virtue. The task of this article is to

¹ - Publicado com a permissão dos autores. Editado pela primeira vez como capítulo 9 da coletânea organizada por J. P. Forgas, *Affect in social thinking and behavior* (pp. 161-175). New York: Psychology Press.

review recent discoveries concerning how specific emotions figure in moral judgments. Our central claim will be that distinct emotions such as compassion, disgust, anger, or gratitude, provide critical input into evaluations of right and wrong. We examined studies of the effects of integral emotion upon moral judgment and punishment. We considered the effects of incidental emotion upon cognitive processes underlying moral judgment, such as perceptions of intentionality or harm, and moral judgments of right and wrong themselves. We think this approach to moralization helps account for individual and cultural differences in moral judgment – both empirical facts that have proven to be thorny issues in the study of moral judgment.

KEYWORDS: Emotion; Moral Judgment; Cognitive Process.

With a few notable exceptions, scholars have largely ignored the role of emotions in moral judgment, which are judgments concerning matters of right, wrong and virtue. More typically, it has been assumed that emotions are antithetical to the reasoned, deliberate, principled qualities of our judgments in the moral realm (for review, see Haidt, 2001). The reasons for this are several, and stem from the age old dichotomy between passion and reason. Moral judgments are thought by many to be achieved through complex cognitive processes, such as Rawls' ideas about a prior-to-society perspective, and assumed to be inclusive and universal, applying to all people and all relevant contexts. Emotions, in contrast, often occur as the result of relatively rapid, automatic appraisals, and are highly subjective and context-bound (Smith, David & Kirby, 2006).

Yet emotions may represent a solution to certain difficulties encountered in the study of morality. One such difficulty is the cultural variation in moral judgment that is apparent in both empirical studies and informal observations. For example, Richard Shweder's work on the moral judgments of people in Eastern India documents that Indian participants find it morally wrong for a child to cut his hair after the death of his father, for a woman to eat with her husband's elder brother, and for upper-caste individuals to come into physical contact with lower-caste individuals (Shweder, Much, Mahapatra, & Park, 1997). People of different cultures often

differ in the moral prioritization they give to matters concerning individual rights, freedoms, duties, and purity (e.g., Haidt, Koller, & Dias, 1993; Miller, 1984; Vasquez, Keltner, Ebenbach, & Banaszynski, 2001).

Just as striking is the ebb and flow of how social issues are moralized; that is, within-culture temporal variation in the moral significance of social issues. For instance, within U.S. culture, the moral significance attached to various issues – cigarette smoking, animal welfare, the death penalty, abortion, and gay marriage as obvious examples – has shifted over time.

Between- and within-culture variation in moral judgment reveals difficulties in identifying universal moral standards and cognitive rules. One way to understand these kinds of variation in moral judgment is to turn to the emotions. The task of this article is to review recent discoveries concerning how specific emotions figure in moral judgments. Our central claim will be that distinct emotions such as compassion, disgust, anger, or gratitude, provide critical input into evaluations of right and wrong. Emotions often serve as moral intuitions (e.g., Haidt, 2001). To set the stage for this analysis, we first will review claims regarding the social functions of emotions which suggest the highly moral nature of many emotions. Drawing upon studies of the effects of specific emotions upon social cognition, we will propose six ways in which emotions figure in moral judgment, reviewing relevant evidence when possible.

Emotions as social commitments

Moral judgments emerged, many have claimed (e.g., de Waal, 1996; Fiske, 1991; Haidt, 2001), to govern the complex social relations that make up human sociality. Moral concerns address many of the problems of social living – the allocation of resources, punishment, the justification of hierarchical arrangements, and so on. To understand how specific emotions contribute to moral judgment, one must first consider the highly social nature of emotions.

In considering the social functions of emotions, we have found a useful answer in commitment-based analyses of emotion and relationships (Frank, 1988, 2002; Gonzaga,

Keltner, Londahl, & Smith, 2001; Haselton & Ketelaar, this volume; Nesse, 1990). The long-term relationships crucial to human survival – pair bonding, parent-child bonds, cooperative alliances, group memberships – often require that individuals devote costly resources to others, and avoid self-interested behaviors that could harm social partners.

These commitment-related problems implicate moral concerns (e.g., that people be good to others) and are met by certain emotions. These emotions, then, motivate courses of action that enhance long-term bonds, such as the devoted care of vulnerable offspring or submissive, conciliatory acts that defuse aggressive encounters (Frank, 1988, 2002). Emotions also serve as signals to others of long-term commitment. For example, displays of love and gratitude are reliable indicators of commitment to marital bonds and cooperative alliances, respectively (see Haselton & Ketellar, this volume).

Emotions motivate commitments related to two general kinds of social problems. In intimate relationships, emotions address problems of reproduction, more specifically, procreation and the raising of offspring to the age of reproduction (Bowlby, 1979; Shaver, Morgan, & Wu, 1996). Sexual desire facilitates the identification of promising sexual partners and the establishment of reproductive relations, whereas love is one component of psychological attachment between romantic partners (Diamond, 2003; Ellis & Malamuth, 2004; Gonzaga et al., 2001; Hazan & Shaver, 1987). Jealousy motivates one to protect a mate from rivals, preserving both the mate's investment in current offspring and the opportunity to reproduce with the mate in the future (Buss & Schmitt, 1993). Filial love, a component of psychological attachment, motivates young and vulnerable offspring to stay close to protective adults. A complementary emotion, compassion, motivates parents to nurture and protect offspring (Shiota, Campos, Keltner, & Hertenstein, 2004).

A second realm in which emotions act as social commitments is related to the problem of cooperation, which lies at the heart of moral concerns about reciprocity and fairness (e.g., Gouldner, 1960; Trivers, 1971). Gratitude at

others' altruistic acts is a signal that one recognizes the value of a benefit received and intends to repay in some form in the future (Trivers, 1971). Guilt occurs following one's own violations of reciprocity and is expressed in apologetic, remedial behavior (Keltner & Buswell, 1996; Tangney, 1992).

Anger motivates the punishing of individuals who have violated rules of reciprocity, and accompanies moral concerns that emerge out of reciprocal relations, such as the concepts of equality and individual rights. Envy motivates individuals to derogate others whose favorable status is unjustified, thus helping to preserve equal relations (Fiske, 1991).

Disgust is integral to the socialization of group members (Rozin, Haidt, & McCauley, 1999a) and may lead to the condemnation of individuals who behave in a deviant manner that threatens the group's sense of civility (Haidt, 2003; Miller, 1997; Rozin et al., 1999a). Cooperation within large groups requires the distribution of labor and resources. Social hierarchies provide a useful heuristic for this process, and are negotiated, in part, through emotions related to dominance and submission (de Waal, 1996; Keltner, Gruenfeld, & Anderson, 2003; Ohman, 1986). Pride is experienced and displayed by individuals who have accomplished some socially valued task, and it projects the expectation of increased social status (Tiedens, Ellsworth, & Mesquita, 2000; Tracy & Robins, 2004).

Embarrassment and shame appease dominant individuals and signal submissiveness (Keltner & Buswell, 1996; Miller & Leary, 1992). Contempt is defined by feelings of superiority and dominance vis-a-vis inferior others. Awe is experienced when one senses the presence of an entity greater than the self, and endows powerful individuals with respect, reverence, and authority (Fiske, 1991; Keltner & Haidt, 2003).

The extant literature on the ultra-social nature of emotions hints at the moral implications of emotional reactions. Many emotions and moral concerns, such as justice, harm, and sexual purity, are intertwined. Emotions, as Lutz and White (1986) observed, are a primary means of

negotiating the place of the self in a social-moral order. In the remainder of this article we detail several different ways that emotions figure into moral judgment.

Emotion-Cognition interactions from an appraisal tendency perspective

Studies within the past thirty years have documented robust and systematic effects of affective states upon numerous cognitive processes, including selective attention, memory, causal attribution, life satisfaction judgments, use of heuristics, and risk perception (e.g., Bless et al., 1996; Bower, 1981; Forgas, 1995, 2001; Lerner & Keltner, 2000, 2001; Mineka & Sutton, 2002; Schwarz & Clore, 1983). In our own work, we have investigated the effects of specific emotions, such as compassion and anger, on social judgment, drawing upon what we have come to call an appraisal tendency framework (Keltner, Ellsworth, & Edwards, 1993; Lerner & Keltner, 2000, 2001; Oveis, Horberg, & Keltner, 2006). This perspective is guided by a simple set of assumptions. A first is that each distinct emotion is defined by a core appraisal, or meaning analysis of the situation. Research on emotion-related appraisals (e.g., Lazarus, 1991; Ortony, Clore, & Collins, 1988; Smith & Ellsworth, 1985; Smith et al., this volume) has revealed the distinct appraisal profiles of many emotions, as well as the notion that each emotion is defined by a core appraisal theme. For example, anger is associated with appraisals of others' responsibility and injustice, fear with uncertainty, and compassion with another's suffering.

A second assumption of appraisal tendency perspectives is that specific emotions influence judgments in a manner consistent with the appraisal tendency. In functional terms, the appraisal tendency accompanying the emotional episode guides cognitive processes to features of the environment related to the problem or opportunity that elicited the emotion. For example, the appraised uncertainty that is central to fear should lead fearful individuals to consistently interpret elevated levels of uncertainty in their environments.

Finally, appraisal tendency perspectives produce clear claims about the domain specificity of the effects of distinct emotions upon judgment. The influence of emotion is limited to spheres of judgment related to the emotion's appraisal. Thus, fear will influence judgments of certainty, risk, and harm, judgment domains most tightly related semantically to its underlying appraisal tendency, but not judgments of blame or fairness, which are domains more closely related to anger (see Lerner & Keltner, 2000, for a fuller treatment of these claims).

As we now turn to the study of the relationship between emotion and moral judgment, we will have several occasions to draw upon studies conducted within an appraisal tendency perspective. This framework points to four questions that have warranted empirical attention. A first concerns the association between emotions and moral appraisals, such as appraisals of harm, rights violations, or impurity.

Some Emotions Have Moral Appraisals

Early appraisal theorists implicitly acknowledged the relations between emotion and moral concerns. Lazarus (1991), for example, highlighted several moral themes, such as injustice, harm, and responsibility, in his analysis of the core-relational themes of the distinct emotions. Scherer (1984), in his componential analysis of the stages of emotion-related appraisal, argued that emotion-eliciting events are in part appraised for their relevance to moral standards.

In what more specific ways, then, are emotions associated with distinct moral appraisals? We provide a preliminary answer to this question, focusing on select emotions and select moral concerns that have been the focus of scholars interested in mapping the moral realm—namely harm, rights, status, purity, and reciprocity. Our suppositions derive from two sources. The first is the emotion-appraisal literature, which has begun to detail connections between moral concerns like justice, fairness, harm and different emotions (e.g., Lazarus, 1991; Scherer, 1984; Smith & Ellsworth, 1985). The second is a recent line of inquiry in

which investigators have begun to document empirical linkages between emotions and established moral concerns, like rights, purity, and obligations and reciprocity (e.g., Batson & Shaw, 1991; Eisenberg & Miller, 1987; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Haidt, 2001, 2003; Haidt et al., 1993; McCullough, Kilpatrick, Emmons & Larson, 2001; Moll et al., 2002; Rozin, Lowery, Imada, & Haidt, 1999b; Sköe, Eisenberg, & Cumberland, 2002; Vasquez et al., 2001). These studies typically ask participants to report associations between moral rules or transgressions and emotion categories captured with words or facial expressions. Guided by these two traditions, we suggest in Table 1 the following connections between emotions and moral appraisals (see Haidt, 2003, for a similar analysis).

Table 1: Emotions and their associated moral concerns

Emotion: Moral Concern

Anger
Rights, freedoms
Compassion
Harm, need
Contempt
Duties, obligations
Disgust
Purity, both sexual and spiritual
Gratitude
Reciprocity, equality
Guilt
Own transgression
Shame

Own character logical flaws
Awe, Elevation
Other's virtue

We expect harm to be associated with compassion, which motivates actions that reduce harm, need, and suffering (e.g., Batson & Shaw, 1991; Eisenberg et al., 1989). Violations of rights and freedoms, such as the right to free speech or freedom of action, should be associated with anger (e.g., Vasquez et al., 2001). Actions that are interpreted as impure and contaminating are associated with disgust (Rozin et al., 1993, 1999a, 1999b).

Appraisals of actions that bolster reciprocity accompany gratitude (McCullough, et al., 2001). The perceived failure of others to adhere to role requirements or the established hierarchy may be linked to the experience of contempt (Rozin et al., 1999b). Appraisals that one has violated a moral code or ethic, in particular by inflicting harm to others, are associated with guilt (Baumeister, Stillwell, & Heatherton, 1994; Higgins, 1987; Keltner & Buswell, 1997; Tangney et al., 1996). Finally, appraisals of others' moral virtue elicit other-praising emotions like elevation and awe (Haidt, 2003; Keltner & Haidt, 2003; McCullough et al., 2001).

But what makes these particular appraisals moral; that is, imbued with the sense that they reflect inarguable truths about right and wrong that must be abided by (i.e., are obligatory and binding across context and culture)? In part, the answer to this question resides in the content of the appraisals. Concerns about harm, rights, reciprocity, and purity, are essential to establishing enduring, cooperative relations within social collectives. The experience of the specific emotion is likewise likely to impart a sense of morality to the underlying appraisal. Subjective feelings of emotions like anger, compassion, or awe feel involuntary, beyond strategic manipulation, and absolute (e.g., Frijda, 1986). The underlying appraisal, for example, that harm or injustice has occurred will therefore also be felt as truthful and right.

With these empirically established relations between moral concern and emotion as a backdrop, we now turn to ways in which emotions figure in moral judgment.

Integral emotions can color moral cognition

Our second claim concerns the integral effects of emotions, or the extent to which an emotion elicited by a cause will trigger moral judgments about that causal event or action.

Whereas it is widely assumed, particularly within moral psychology, that emotions play a minor role in moral judgment (for review, see Haidt, 2001), we are proposing that emotional reactions make powerful and direct contributions to various facets of moral judgments (see also Damasio, 1994).

Numerous studies show that participants rely on their emotions to reach moral judgments about actions portrayed in hypothetical scenarios. In one study, participants were presented with a series of harmless but offensive moral dilemmas (Haidt, 2001). As an example, one scenario depicts a man that has sex with a sterilized dead chicken, then cooks and eats it.

Participants were asked to make moral evaluations of the scenarios, which, not surprisingly, overwhelmingly involved moral condemnation. When asked to justify this decision, participants formulated elaborate explanations of how an action could be harmful to a particular individual. However, after the experimenter discounted the harm-based justifications through a rehashing of the story's facts, participants most commonly concluded that they knew the action was "just wrong" despite not being able to provide a convincing cognitive rationale. Participants' emotional reactions had formulated their enduring moral evaluation.

In another study, Haidt and colleagues presented harmless but offensive acts to participants in the U.S. and Brazil (Haidt et al., 1993). An interesting cultural difference emerged that illustrates the role of emotion in moral judgment: Brazilian participants were more inclined than the U.S. participants, especially upper SES U.S. participants, to punish

individuals portrayed as engaging in impure, offensive behaviors. Germane to the current argument about the integral effects of emotion on moral judgment, individuals who viewed the acts as morally wrong showed a high association between punitive tendencies and feelings of disgust and upset in response to the scenarios.

This research demonstrates that people will often rely on their feelings of discomfort to judge and punish offensive, contaminating, and impure actions. Work by Weiner and colleagues indicates that emotions are integral to punitive judgments of different moral transgressions (Weiner, Graham, & Reyna, 1997). They have studied participants' emotional reactions of anger and sympathy to various kinds of moral transgressions and assessed participants' inclination to punish in retributive fashion, seeking pain that would match the crime, or utilitarian fashion, seeking to reduce the likelihood that the criminal would commit such a crime in the future. Individuals angered by moral transgressions prefer the most vengeful form of punishment -- retributive punishment. In contrast, participants who feel sympathy in response to the same crime prefer less severe forms of punishment, ones that protect the criminal and society, namely utilitarian punishment. In short, anger and sympathy contribute directly to one index of moral judgment: preferred forms and severities of punishment.

These initial studies suggest that moral judgments of right and wrong, and the punishments deemed appropriate for different moral transgressions, are shaped by integral emotion -- that is, emotion triggered by the morally relevant action itself. Further studies are needed to explore other emotions and different moral judgments. For example, we would expect compassion and gratitude to shape moral judgments related to harm and reciprocity, respectively. Feelings of contempt, we further hypothesize, should contribute to the sense that violations of status-based roles are morally wrong. We now turn to our third claim that derives from an appraisal tendency perspective: emotions unrelated to the event to be judged -- that is, incidental emotions -- can shape moral judgments.

Incidental emotions can color moral cognition

The incidental effects of emotions on social judgment have been documented by numerous investigators (Baumeister et al., this volume; Clore & Storbeck, this volume; Forgas, 2001; Isen, Daubman, & Nowicki, 1987; Schwarz & Clore, 1983, 1996). Emotions elicited by one source – a sunny day or disturbing film, for example – shape judgments in seemingly unrelated domains: how satisfied one is with a political leader's policy making or the likelihood of positive life outcomes in the future. This literature has fairly striking implications for the study of emotion and moral cognition: evanescent emotions elicited by the most trivial of sources can profoundly shape the content of moral judgments, which have been considered by many to be fairly impervious to contextual influences.

We anticipate two different routes by which emotions will have incidental effects upon moral judgments. A first is by shaping constituent cognitive processes that underlie moral judgment. That is, moral judgments of right and wrong hinge critically upon judgments of the harm produced by an action, the intentionality of the actor, the fairness of the act and so on. Several studies carried out within an appraisal tendency framework have shown that emotions influence these cognitive processes in distinct fashion. Thus, affective states influence attributional processes in dramatic fashion (Forgas, 1994).

With respect to specific emotions, anger heightens the sense that other individuals have intentionally caused negative and positive outcomes that are unrelated to the elicitor of the emotion. In one test of these ideas, Keltner and colleagues (1993) induced participants to experience anger by imagining being the victim of an unfair action on the part of a teaching assistant. When judging an ambiguous social event, angry participants, as opposed to sad participants, attributed greater responsibility to a protagonist in the story (see also Feigenson, Park, & Salovey, 2001; Lerner, Goldberg, & Tetlock, 1998; Quigley & Tedeschi, 1996). Anger thus heightens the

salience of the intention behind others' actions, and increases judgments of moral wrongdoing of individuals who have committed harm.

Fear, in contrast, appears to amplify individuals' perceptions of threat associated with events unrelated to the original cause of fear. For example, people who have been induced to experience fear provide higher estimates of the likelihood of risky, harmful events in the future compared to angry participants (Lerner & Keltner, 2001). We would expect people experiencing fear, therefore, to judge threatening or harmful acts to the self as more immoral because of the documented sensitivity to these issues.

Finally, more recent work suggests that compassion and pride exert different influences upon an important component of certain moral judgments: perceived similarity between self and others (Oveis et al., 2006). The perceived similarity between self and other is central to the calculus of whether one engages in pro-social action (Sober & Wilson, 1998).

In the research of interest, participants were induced to experience compassion or pride through exposure to images depicting harm (e.g., a malnourished child) or sources of pride (e.g., pictures of the participants' university). After the emotion manipulation, individuals rated how similar they were to a wide variety of social groups, including groups presumably very similar to the participant (e.g. young adults, United States citizens) and those presumed to be very different from the participant (e.g. the elderly, citizens of other countries). Individuals induced to experience compassion displayed elevated perceptions of similarity to the set of groups overall.

Taken together, these studies indicate that emotions elicited by one cause influence important cognitive processes that are involved in moral judgments of right and wrong, namely judgments of intentionality, harm, and similarity between self and other. We would also expect emotions to influence moral judgments in a second incidental fashion, by contributing directly to moral judgments of right or wrong, and fairness or unfairness, of events unrelated to the elicitor of the emotion. In one of the few demonstrations of this effect,

Keltner and colleagues (1993) led participants to move four facial muscles in ways that led to the configuration of an anger expression. Configuring the face in this fashion lead participants to report feeling anger, and these participants later judged a series of policy related events as less fair compared to sad participants. Here, emotion induced through a physical event—moving facial muscles – altered a central dimension of moral judgment -- perceptions of fairness. Other emotions should also influence moral judgments of events and objects unrelated to the cause of the emotion. Compassion, for example, should amplify judgments of right and wrong of harm and need related actions; disgust should amplify judgments of the moral appropriateness of violations of purity. These speculations assume that the effects of emotions are domain specific, and that they are most robust in certain moral domains (e.g., harm, rights, purity), a theme to which we now turn.

Emotions will have domain-specific effects upon moral cognition

A fourth claim deriving from an appraisal tendency perspective is that the effects of specific emotions on judgment are bounded (see also Forgas, 1995, this volume, for a fuller discussion of moderators of effects of moods upon cognition). We have claimed that the influence of a specific emotion is limited to spheres of judgment related to the emotion's appraisal theme. In relevant work, it was found that fear only influenced risk perception of events that were high or low in controllability (Lerner & Keltner, 2001). In similarly motivated work, DeSteno and colleagues (2000) asked people feeling anger or sadness to estimate the likelihood of thematically "sad" events (of the 60,000 orphans in Romania, how many will be malnourished?) and "angry," unfair events (of the 20,000 violent criminals put on trial in the upcoming year, how many will be set free because of legal technicalities?). Angry participants judged the anger inducing events to be more likely, whereas sad participants judged the sadness inducing events to be more likely. Sadness and anger, however, did not influence estimates of all negative events,

only those related to the underlying appraisal themes of loss and injustice respectively.

The notion of domain-specific influences of emotions on judgment generates numerous predictions that await empirical attention. As simple examples, we would expect gratitude to influence moral judgments in the realm of reciprocity, but not harm, and the converse to be true of compassion. We would expect anger to shape moral judgments in the realm of rights and justice, but not purity, and the converse to be true of disgust. In recent work, we have documented that compassion heightens a sense of similarity to other groups and individuals, but importantly, only to those groups or individuals who are vulnerable and in need, consistent with our analysis of domain specificity (Oveis et al., 2006). More specifically, people feeling compassion indicated a stronger sense of connection to groups perceived as relatively weak (e.g., orphaned children), but less connection to groups perceived as relatively strong (e.g., corporate lawyers). Thus, we expect future studies to show that specific emotions guide moral judgments in domain specific ways.

Moralization: Emotional intuitions and variation in moral judgment

We began our article by posing a conundrum. On the one hand, moral judgments are thought to be universal, absolute, and binding across contexts and time. On the other hand, empirical studies find that moral judgments vary across culture and time and within individuals. We proposed that considering the emotional intuitions that guide moral judgments may help resolve this problem, and in the first part of this article endeavored to show how emotions guide moral judgments.

In this final part of the article, we will offer a more speculative answer to the question of how actions, objects or issues acquire moral significance within individuals and cultures, in other words, how they are moralized. Salient examples include the moralization of cigarette smoking and vegetarianism over the past century. Currently, these issues are

considered moral by many, though not all, individuals in the U.S. (Fessler, Arguello, Mekdara & Macias, 2003; Rozin, Markwith & Stoess, 1997; Rozin & Singh, 1999). How does moralization work within the emotions as moral intuitions perspective?

We suggest that moralization occurs when the moral frame of an action or issue – for example, harm, rights, purity, or obligation – matches a pre-existing emotional tendency related to that moral framing. For example, an individual that currently or dispositionally experiences compassion will deem issues and events (such as animal rights or the death penalty) as moral when they are framed in terms of harm to vulnerable entities.

Consider an illustrative study that speaks to the process of moralization. DeSteno and colleagues (2004) induced participants to feel either sadness or anger by reading evocative hypothetical newspaper stories. Participants were then presented with one of two persuasive messages about raising taxes – a moral issue for many American citizens. One of the messages was sadness framed, and emphasized how increasing taxes would help special needs infants and the elderly. The other message was anger-framed, and emphasized how increasing taxes would keep criminals from getting off on legal technicalities and would prevent aggravating traffic jams. Sad people indicated stronger moral attitudes toward raising taxes when presented with the sadness framed message, whereas angry people indicated stronger moral evaluations of taxation when given the anger-framed message. A match between moral frame of an action and pre-existing emotion produced moralization of the issue. This analysis in part resembles Rozin's account of moral disgust, in which conceptions of purity, the natural order, and contamination acquire moral status through recruitment of a simpler emotional distaste system (e.g., Rozin, 1996; Rozin et al., 1999a; see also Marzillier & Davey, 2004), as well as Miller's (1997) observation that disgust broadens the moral domain to indiscriminately include objects of impurity and pollution, despite their amoral status accorded by principles of justice and fairness.

This account of moralization helps illuminate individual differences in moral judgment, an issue that has gained currency in the field in part thanks to Damasio and colleagues' research on patients who have suffered damage to the ventromedial prefrontal cortex, and who show many deficits in the social moral realm. We would expect people prone to a particular emotion, say disgust or compassion, to moralize issues when they are framed according to the moral concerns – purity or harm in our examples – most closely intertwined with the emotion. A recent study conducted by Horberg and Keltner (2005) lends credence to this claim. In this research, disgust prone individuals indicated the inclination to punish behaviors that violated a sense of purity, and reward behaviors that upheld purity; they were not, however, inclined to punish or reward behaviors unrelated to purity, the moral appraisal of disgust.

Our emotional account of moralization also helps make sense of certain cultural variations in moral judgment. For example, several recent studies suggest that cultures vary quite significantly in which moral concerns – rights, purity, or duties and obligations – are salient (Rozin et al., 1999b; Shweder et al., 1997; Vazquez et al., 2001). To the extent that a moral concern is salient in a particular culture, as the violation of rights is in the U.S., then one would expect especially strong linkages between the moral concern and emotion within that realm. A recent study conducted in the United States and Republic of Philippines supports this prediction (Vazquez et al., 2001). College students in the two cultures were presented with violations of moral rules related to rights, purity, and obligation, and asked to label how they would feel in response to such a violation with one of several facial expressions, including ones depicting anger, disgust, contempt, or sadness. Across the two cultures, violations of rights were more likely to be labeled with anger than with contempt or disgust expression, consistent with our earlier claims about hypothesized relations between moral concerns and specific emotions. Consistent with our moralization hypothesis about rights and anger in the U.S., American college students were more likely to label violations of rights in terms of anger than

were Filipino students, and less likely to use the anger expression to label violations of purity or duties and obligations. As moral concerns become salient in a culture, they form tighter linkages with specific emotions.

Conclusion

As the study of the effects of affect and cognition has matured, it has become clear that many judgments, such as causal attribution, risk perception, or loss aversion, once thought to be universal regularities of the mind, are in fact swayed profoundly by fleeting emotions and moods. In this article we have argued that this is also true for moral judgment.

We have drawn extensively upon an appraisal tendency perspective, which posits that distinct emotions influence specific realms of judgment according to the underlying meaning appraisal associated with the emotion. We extended this literature to the study of distinct emotion and moral judgment. This extension generated six predictions that we evaluated.

We reviewed evidence concerning relations between moral appraisals and emotion, which are fairly robust for three moral concerns – rights/freedoms, duties/obligations, and purity – and three emotions – anger, contempt, and disgust. We examined studies of the effects of integral emotion upon moral judgment and punishment. We considered the effects of incidental emotion upon cognitive processes underlying moral judgment, such as perceptions of intentionality or harm, and moral judgments of right and wrong themselves.

And in a more speculative vein, we proposed how emotional intuitions contribute to the moralization of issues, when a pre-existing emotion or emotional tendency matches the moral framing of an issue, thus giving rise to the subjective sense that the issue is a matter of absolute right and wrong. We think this approach to moralization helps account for individual and cultural differences in moral judgment – both empirical facts that have proven to be thorny issues in the study of moral judgment.

As empirical studies increasingly illuminate the contribution of distinct emotions to moral judgment, several opportunities await. This line of inquiry will shape the understanding of moral judgment, as we have suggested in this review. Relevant studies will necessarily explore emotions such as gratitude, compassion, envy, and awe, which have long been on the margins of affective science. As researchers continue to explore the central nervous system correlates of moral judgment (e.g., Damasio, 1994; Greene et al., 2001), a focus on distinct emotions could reveal more precise relations between central nervous system-structure and facets of moral judgment. And in terms of broader conceptualization, the study of the roles of emotions within moral judgment will inform the claim that emotions, once thought to be largely irrational and intra-psychic phenomena, are in fact principled elements of the social moral order.

References

- BATSON, C.D., & Shaw, L.L. (1991). Evidence for altruism: Toward a pluralism of pro-social motives. *Psychological Inquiry*, 2, 107-122.
- BAUMEISTER, R.F., Stillwell, A.M., & Heatherton, T.F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, 115, 243-267.
- BLESS, H., Clore, G.L., Schwarz, N., Golisano, V., Rabe, C., & Wolk, M. (1996). Mood and the use of scripts: Does a happy mood really lead to mindlessness? *Journal of Personality and Social Psychology*, 71, 665-679.
- BOWER, G.H. (1981). Mood and memory. *American Psychologist*, 36, 129-148.
- BOWLBY, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
- Buss, D.M., & Schmidt, D.P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204-232.

DAMASIO, A.R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: G.P. Putnam.

Desteno, D., PETTY, R.E., RUCKER, D.D., WEGENER, D.T., & BRAVERMAN, J. (2004). Discrete emotions and persuasion: The role of emotion-induced expectancies. *Journal of Personality and Social Psychology*, *86*, 43-56.

Desteno, D., PETTY, R.E., WEGENER, D.T., & RUCKER, D.D. (2000). Beyond valence in the perception of likelihood: The role of emotion specificity. *Journal of Personality and Social Psychology*, *78*, 397-416.

DeWAAL, F.B.M. (1996). Conflict as negotiation. In W.C. McGrew, L.F. Marchant, & T. Nishida (Eds.), *Great ape societies* (pp. 159-172). New York: Cambridge University Press.

DIAMOND, L.M. (2003). What does sexual orientation orient? A biobehavioral model distinguishing romantic love and sexual desire. *Psychological Review*, *110*, 173-192.

EISENBERG, N., FABES, R.A., MILLER, P.A., FULTZ, J., SHELL, R., MATHY, R.M., & RENO, R.R. (1989). Relation of sympathy and personal distress to prosocial behavior: A multimethod study. *Journal of Personality and Social Psychology*, *57*, 55-66.

EISENBERG, N., & Miller, P.A. (1987). The relation of empathy to prosocial and related behaviors. *Psychological Bulletin*, *101*, 91-119.

ELLIS, B.J., & MALAMUTH, N.M. (2000). Love and anger in romantic relationships: A discrete model. *Journal of Personality*, *68*, 525-556.

FEIGENSON, N., Park, J., & Salovey, P. (2001). The role of emotions in comparative negligence judgments. *Journal of Applied Social Psychology*, *31*, 576-603.

FESSLER, D.M.T., ARGUELLO, A.P., MEKDARA, J.M., & MACIAS, R. (2003). Disgust sensitivity and meat consumption: A test of an emotivist account of moral vegetarianism. *Appetite*, *41*, 31-41.

FISKE, A. P. (1991). *Structures of social life*. New York: Free Press.

- FORGAS, J.P. (1994). Sad and guilty? Affective influences on the explanation of conflict episodes. *Journal of Personality and Social Psychology*, *66*, 56-68.
- FORGAS, J.P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin*, *117*, 39-66.
- FORGAS, J.P. (2001). The affect infusion model (AIM): an integrative theory of mood effects on cognition and judgments. In L.L. Martin & G.L. Clore (Eds.), *Theories of mood and cognition: A user's guidebook* (pp. 99-134). Mahwah, NJ: Lawrence Erlbaum Associates.
- FRANK, R.H. (1988). *Passions within reason: The strategic role of the emotions*. New York: W.W. Norton & Co.
- FRANK, R.H. (2002). Altruism in competitive environments. In R.J. Davidson & A. Harrington (Eds.), *Visions of compassion* (pp. 182-211). London: Oxford University Press.
- FRIJDA, N.H. (1986). *The emotions*. Cambridge, England: Cambridge University Press.
- GONZAGA, G.C., KELTNER, D., LONDAHL, E.A., & SMITH, M.D. (2001). Love and the commitment problem in romantic relations and friendship. *Journal of Personality and Social Psychology*, *81*, 247-262.
- GOULDNER, A.W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, *25*, 161-178.
- 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.
- HAIDT, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, *108*, 814-834.
- HAIDT, J. (2003). The moral emotions. In R.J. Davidson, K.R. Scherer, & H.H. Goldsmith (Eds.), *Handbook of affective sciences* (pp. 852-870). London: Oxford University Press.

- 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.
- HAZAN, C., & SHAVER, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*, 511-524.
- HIGGINS, E.T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, *94*, 319-340.
- HORBERG, E.J., & KELTNER, D. (2006). *Disgust, compassion, and moralization*. Manuscript in preparation, University of California, Berkeley.
- ISEN, A.M., DAUBMAN, K.A., & NOWICKI, G.P. (1987). Positive affect facilitates creative problem solving. *Journal of Personality and Social Psychology*, *52*, 1122-1131.
- KELTNER, D., & BUSWELL, B.N. (1996). Evidence for the distinctness of embarrassment, shame, and guilt: A study of recalled antecedents and facial expressions of emotion. *Cognition and Emotion*, *10*, 155-171.
- KELTNER, D., & BUSWELL, B.N. (1997). Embarrassment: Its distinct form and appeasement functions. *Psychological Bulletin*, *122*, 250-270.
- KELTNER, D., ELLSWORTH, P.C., & EDWARDS, K. (1993). Beyond simple pessimism: Effects of sadness and anger on social perception. *Journal of Personality and Social Psychology*, *64*, 740-752.
- KELTNER, D., GRUENFELD, D.H., & ANDERSON, C. (2003). Power, approach, and inhibition. *Psychological Review*, *110*, 265-284.
- KELTNER, D., & HAIDT, J. (2003). Approaching awe, a moral, spiritual, and aesthetic emotion. *Cognition and Emotion*, *17*, 297-314.
- LAZARUS, R.S. (1991). *Emotion and adaptation*. London: Oxford University Press.
- LENER, J.S., GOLDBERG, J.H., & TETLOCK, P.E. (1998). Sober second thought: the effects of accountability, anger, and

authoritarianism on attributions of responsibility. *Personality and Social Psychology Bulletin*, *24*, 563-574.

LERNER, J.S., & KELTNER, D. (2000). Beyond valence: Toward a model of emotion-specific influences on judgment and choice. *Cognition and Emotion*, *14*, 473-493.

LERNER J.S., & KELTNER, D. (2001). Fear, anger, and risk. *Journal of Personality and Social Psychology*, *81*, 146-159.

LUTZ, C., & WHITE, G.M. (1986). The anthropology of emotions. *Annual Review of Anthropology*, *15*, 405-436.

MARZILLIER, S.L., & DAVEY, G.C.L. (2004). The emotional profiling of disgust-eliciting stimuli: Evidence for primary and complex disgusts. *Cognition and Emotion*, *18*, 313-336.

MILLER, J. (1984). Cultural diversity in the morality of caring: Individually oriented versus duty-based interpersonal codes. *Cross-Cultural Research: The Journal of Comparative Social Science*, *28*, 3-39.

MILLER, R.S., & LEARY, M.R. (1992). Social sources and interactive functions of emotion: The case of embarrassment. In M.S. Clark (Ed.), *Emotion and social behavior: Review of personality and social psychology* (Vol. 14, pp. 202-221). Thousand Oaks, CA: Sage Publications.

Mccullough, M.E., KILPATRICK, S.D., EMMONS, R.A., & LARSON, D.B. (2001). Is gratitude a moral affect? *Psychological Bulletin*, *127*, 249-266.

MILLER, W.I. (1997). *The anatomy of disgust*. Cambridge, MA: Harvard University Press.

MINEKA, S., & SUTTON, S.K. (1992). Cognitive biases and the emotional disorders. *Psychological Science*, *3*, 65-69.

MOLL, J., de OLIVIERA-SOUZA, R., ESLINGER, P.J., BRAMATI, I.E., MOURAO-MIRANDA, J., ANDRAIULO, P.A., & PESSOA, L. (2002). The neural correlates of moral sensitivity: A functional magnetic resonance imaging investigation of basic and moral emotions. *Journal of Neuroscience*, *22*, 2730-2736.

- NESSE, R.M. (1990). Evolutionary explanations of emotions. *Human Nature, 1*, 261-289.
- OHMAN, A. (1986). Face the beast and face the fear: Animal and social fears as prototypes for evolutionary analyses of emotion. *Psychophysiology, 23*, 123-145.
- ORTONY, A., CLORE, G.L., & COLLINS, A. (1988). *The cognitive structure of emotions*. New York: Cambridge University Press.
- OVEIS, C., HORBERG, E.J., & KELTNER, D. (2006). *Compassion as a moral intuition*. Manuscript submitted for publication.
- QUIGLEY, B.M., & TEDESCHI, J.T. (1996). Mediating effects of blame attributions on feelings of anger. *Personality and Social Psychology Bulletin, 22*, 1280-1288.
- ROZIN, P. (1996). Towards a psychology of food and eating: From motivation to module to model to marker, morality, meaning, and metaphor. *Current Directions in Psychological Science, 5*, 18-24.
- ROZIN, P., HAIDT J., & McCAULEY, C. (1999a). Disgust: The body and soul emotion. In T. Dalgleish & M.J. Power (Eds.), *Handbook of Cognition and Emotion* (pp. 429- 445). New York: John Wiley & Sons.
- ROZIN, P., LOWERY, L., IMADA, S., & HAIDT, J. (1999b). The CAD triad hypothesis: A mapping between three moral emotions (contempt, anger, disgust) and three moral codes (community, autonomy, divinity). *Journal of Personality and Social Psychology, 76*, 578-586.
- 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.
- ROZIN, P., & SINGH, L. (1999). The moralization of cigarette smoking in the United States. *Journal of Consumer Psychology, 8*, 339-342.
- SCHERER, K.R. (1984). On the nature and function of emotion: A component process approach. In K. Scherer and P. Ekman

(Eds.) *Approaches to Emotion*. (pp. 293- 318). Hillsdale NJ: Lawrence Erlbaum.

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.

SCHWARZ, N., & CLORE, G.L. (1996). Feelings and phenomenal experiences. In E.T. Higgins & A.W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 433-465). New York: Guilford Press.

SHAVER, P.R., MORGAN, H.J., & WU, S. (1996). Is love a “basic” emotion? *Personal Relationships*, *3*, 81-96.

SHIOTA, M.N., C Ampos, B., Kel Tner, D., & HERTENSTEIN, M.J. (2004). Positive emotion and the regulation of interpersonal relationships. In P. Philippot & R.S. Feldman (Eds.), *The regulation of emotion* (pp. 127-155). Mahwah, NJ: Lawrence Erlbaum Associates.

SHWEDER, R.A., MUCH, N.C., MAHAPATRA, M., & PARK, L. (1997). The “big three” of morality (autonomy, community, and divinity), and the “big three” explanations of suffering. In A. Brandt & P. Rozin (Eds.), *Morality and Health* (pp. 119-169). New York: Routledge.

SKOE, E.E.A., EISENBERG, N., & CUMBERLAND, A. (2002). The role of reported emotion in real-life and hypothetical moral dilemmas. *Personality and Social Psychology Bulletin*, *28*, 962-973.

SMITH, C.A., & ELLSWORTH, P.C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology*, *48*, 813-838.

SOBER, E., & WILSON, D.S. (1998). *Unto others: The evolution and psychology of unselfish behavior*. Cambridge, MA: Harvard University Press.

TANGNEY, J. (1992). Situational determinants of shame and guilt in young adulthood. *Personality and Social Psychology Bulletin*, *18*, 199-206.

TANGNEY, J.P., WAGNER, P.E., HILL-BARLOW, D., MARSCHALL, D.E., & GRAMZOW, R. (1996). Relation of shame and guilt to constructive versus destructive responses to anger across the lifespan. *Journal of Personality and Social Psychology*, *70*, 797-809.

TIEDENS, L.Z., ELLSWORTH, P.C., & MESQUITA, B. (2000). Stereotypes about sentiments and status: Emotional expectations for high- and low-status group members. *Personality and Social Psychology Bulletin*, *26*, 560-574.

TRACY, J.L., & ROBINS, R.W. (2004). Show your pride: Evidence for a discrete emotion expression. *Psychological Science*, *15*, 194-197.

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

VASQUEZ, K., KELTNER, D., EBENBACH, D.H., & BANASZYNSKI, T.L. (2001). Cultural variation and similarity in moral rhetorics: Voices from the Philippines and the United States. *Journal of Cross-Cultural Psychology*, *32*, 93-120.

WEINER, B., GRAHAM, S., & REYNA, C. (1997). An attributional explanation of retributive versus utilitarian philosophies of punishment. *Social Justice Research*, *10*, 431-452.