

- 27 Kierkegaard's account goes some way toward explaining why we appear to have ethical responses to fictional characters, and why reading fiction can hone our ethical outlook generally. However, much remains to be said about this.
- 28 I am grateful to the audience (one audience member in particular) of this paper at the Truth Matters conference (Toronto, 2010) for raising the issue of moral obligation, as well as the issue of "pathological subjectivities," discussed below.
- 29 Robert Brandom articulates this problem with great perspicacity in "Some Pragmatist Themes in Hegel's Idealism: Negotiation and Administration in Hegel's Account of the Structure and Content of Conceptual Norms," *European Journal of Philosophy* 7 (August 1999): 164–89.
- 30 Kierkegaard, *Concluding Unscientific Postscript*, 195.
- 31 *Ibid.*, 195–6.
- 32 *Ibid.*, 142.
- 33 *Ibid.*, 144.
- 34 *Ibid.*, 167.
- 35 See Don Marquis, "Why Abortion is Immoral," in *The Right Thing to Do*, ed. James and Stuart Rachels, fourth ed. (Boston: McGraw Hill, 2007).
- 36 Rorty, *Contingency, Irony, and Solidarity*, 190.
- 37 Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations* (New York, Schocken Books, 1969). See in particular section xv.
- 38 See George Weller, *First into Nagasaki* (New York: Crown Publishing Group, 2006).
- 39 By emphasizing "understanding," I am pointing to an epistemic relation between the subjective truth of one's existence and a kind of immediate awareness that is grounded in it. Though the relation remains obscure (if only because "immediacy," strictly speaking, suggests the absence of a relation), it seems appropriate to retain some idea of such a relation in light of Kierkegaard's comments (discussed above) concerning "ethical knowing."
- 40 Rorty, *Contingency, Irony, and Solidarity*, xvi.

Theories of Concepts and Moral Truth

JOHN J. PARK

Concepts are the building blocks of thought. They take part crucially in various aspects of cognition such as categorizing objects, induction, deduction, and analogy making. Non-cognitivism and subjectivism are two meta-ethical views that make claims about the nature or structure of our moral concepts in moral judgments, concepts that are in part the building blocks of such thoughts. By claiming that all moral judgments are the expression of our emotions, such theories conclude that the moral concepts in our judgments are primarily constituted by emotions or sentiments. However, recent findings in empirical moral psychology show that such moral concepts are not always primarily constituted by emotions. Rather, such concepts at times may be primarily composed of theoretical reasoning aspects. If this is the case, then non-cognitivism and subjectivism are false because not all moral concepts in moral judgments are primarily constituted by our emotions, and thus not all moral judgments are the expression of our emotions.

In this chapter I first explain non-cognitivism and subjectivism. Next I provide a brief but relevant overview of the concepts literature. Finally I examine recent empirical evidence in moral psychology that shows not all moral concepts in judgments are primarily constituted by emotions.

NON-COGNITIVISM AND SUBJECTIVISM

Generally understood, non-cognitivists such as A.J. Ayer, C.L. Stevenson, and Simon Blackburn hold that moral judgments express our

emotions and that moral properties do not exist. Generally, for non-cognitivists, it is because our moral judgments are primarily emotional expressions that such judgments do not describe the world and thus, strictly speaking, are incapable of being true or false. For instance, Ayer claims that moral judgments are merely the expression of our emotions, where saying that a particular act is wrong does not ascribe a moral property to the act but communicates our feelings.¹ Stevenson has a slightly more sophisticated account and claims that moral judgments express the fact that we like or dislike something.² For example, my claim that "murder is wrong" is factual in that it is true that I do not like murder. However, for Stevenson, the primary function of moral judgments is to express our emotions and enjoin others to share in our same attitude. Blackburn is a modern-day non-cognitivist who argues that moral judgments are primarily the expression of our emotions or attitudes. He also attempts to account for the underlying objectivity that appears to exist in ordinary moral discourse.³ Blackburn, strictly speaking, does not believe judgments can be true or false, and so he attempts to explain how or why everyday normal ethical conversations appear to be discussions about what is morally true and morally false even though such truth does not exist. While Blackburn to an extent does allow that reasoning may be involved in moral judgments, he believes that such judgments are still primarily the expression of our emotions. For instance, he states, "denying that X is good or right is rejecting a favourable attitude to X."⁴

Allan Gibbard is also a modern-day non-cognitivist. However, he is excluded from the scope of the concepts-based argument because he does not claim that moral judgments are directly the expression of our emotions. Rather, they are the expression of our acceptance of norms for when we should feel emotions such as guilt and anger. In this manner, Gibbard mentions rather than uses emotions in his meta-ethical views on moral judgment. Due to this fact, I will not criticize Gibbard's specific non-cognitivist view in this chapter, and my concepts-based argument will focus on those non-cognitivist views, such as those by Ayer, Stevenson, and Blackburn, that claim moral judgments are primarily the expression of one's emotions.

Subjectivists in ethics argue that moral judgments stem from our subjective emotions but may be true or false if they successfully report the sentiments of the judge.⁵ Since this stance adopts a relativistic theory of truth, this is a moral relativism rather than a non-cogni-

tivism because moral judgments may be truth-apt relative to the individual, whereas non-cognitivists hold a deflationary theory of truth in which judgments, strictly speaking, cannot be true or false. Subjectivism allows for the truth-aptness of moral judgments, and so it is categorized as a cognitivist rather than non-cognitivist theory.

Both non-cognitivism and subjectivism can be viewed as making a claim about moral concepts. Moral judgments contain mental representations of which the crucial ones are moral concepts. For example, the thought *killing is wrong* contains three concepts, where *wrong* is the important moral concept in the judgment.⁶ If non-cognitivism or subjectivism is true and our moral judgments primarily express our emotions of approbation or disapprobation, then our moral concepts, which are the normative concepts in judgments, must primarily be constituted by sentiments and emotions. Hence, if primarily emotions constitute the moral concepts in judgments, then such judgments express our emotions.

THE THEORY-THEORY OF CONCEPTS

For my purposes, I do not need to explain all the various theories of concepts. Rather, I will examine only those theories that the relevant moral psychology literature will support. Such an examination will provide the information necessary to understand the given concepts-based argument.

The theory-theory emerged out of psychology in the 1980s and became established based on its power to explain categorization as well as on its capacity to provide a detailed account of concept acquisition. In *The Origin of Species*, Charles Darwin argues that the classification of biological species should not be based on theory-neutral superficial similarities but should be grounded in the causal explanations that underlie the similarities among organisms. In "Natural Kinds," W.V.O. Quine states that an individual's psychological development and the development of society in regards to distinguishing and characterizing natural kinds are first based on perceptual superficial similarities.⁷ However, through continual development and maturation, the individual and society use more sophisticated scientific theories or knowledge to draw such distinctions. Along the lines of, but not necessarily in full agreement with, these thinkers, the theory-theory of concepts states that concepts are themselves theories. Theories contain scientific, causal, functional, and general background knowledge⁸ about

the extension of a concept and can explain things such as categorization in concrete concepts.⁹

The theory-theory of concepts states that concepts are constituted by theories about the world that can explain things such as how we categorize. The theory-theory claims that theoretical knowledge of the world rather than superficial properties of objects or actions play a causal explanatory role in cognition. For example, Frank Keil ran a study in which researchers asked participants whether an animal in a given scenario was a horse or a cow.¹⁰ In the situation, there is an animal that is called a horse, makes horse sounds, looks like a horse, wears a saddle, and eats oats and hay. However, scientists run blood tests and X-rays on it, and they discover that its insides are actually the insides of a cow. Keil found that older children and adults perceived the scientists' discoveries as relevant for determining natural kind membership. These subjects relied not on superficial similarities but on folk biological theories of hidden essences to decide that the animal was really a cow despite appearing to be a horse. This study provides evidence that some individuals' concept *horse* is a theory-theory concept and is constituted by folk theories of biological hidden essences.

As an example of the importance and use of causal knowledge in cognition, being curved is an equally typical feature in bananas and boomerangs. However, subjects give more weight to this attribute in boomerangs because they falsely believe that curvature is related to the boomerang's property of returning to the thrower.¹¹ This relationship between the two features leads subjects to think that being curved is more required for a boomerang than for a banana. Here, theory-theorists do not necessarily deny that we may have in mind superficial features when representing a class, but they do emphasize the importance of background knowledge or theories in providing the underlying causal explanation to such features as well as in deciding what weight such features may possess.

Theory-theorists also hold that there are domain differences for types of knowledge where different ontological domains contain different types of central beliefs. For example, while natural kinds are believed to have hidden essences, the analogue for artifact kinds is generally intended function.¹² For example, if a hammer's superficial features are altered such that it cannot properly function and can no longer drive nails into a piece of wood, then theory-theorists no longer consider the object a hammer. This contrasts with natural

kinds where, for example, so long as an animal has cow innards or a cow essence, it is a cow even if it appears to be a horse.

To date, the theory-theory has not been experimentally supported for moral concepts. However, if the theory-theory is a viable view for moral concepts, then some moral concepts will be constituted by normative ethical theories. Just as the theory-theory for concrete concepts may be composed of folk scientific theoretical knowledge, the theory-theory for moral concepts claims that such concepts are composed of ethical theory knowledge. Thus, for example, *right action* may be constituted by the Kantian knowledge *that which may be willed to be a universal law*. Moreover, it may be constituted by the act utilitarian knowledge *perform that act which creates the greatest happiness*, or it may be composed of the neo-virtue ethics knowledge *that action which the virtuous agent will perform*.

EPISTEMIC EMOTIONISM

To date, no one has provided a theory to the effect that the emotions constitute concrete concepts. However, Jesse Prinz offers such a theory for moral concepts within his neo-empiricist proxytype concept framework.¹³ In *The Emotional Construction of Morals*, Prinz discusses what he calls *epistemic emotionism*, which contends that our moral concepts are essentially related to emotions. By "essentially related," Prinz means that moral concepts are related to emotions dispositionally and at times constitutionally. Prinz distinguishes between sentiments and emotions, where sentiments are standing dispositions stored in long-term memory to feel emotions. Emotions are occurrent manifestations in working memory of dispositional sentiments. In making this distinction, Prinz allows for the fact that at times we may make a moral judgment without feeling any emotions, but we are still disposed to feel such emotions. Thus, in such cases of judgment, our moral concepts, which are in part the building blocks of moral judgments, are constituted by our sentiments, which are dispositions to feel emotions of approbation and disapprobation even though we do not presently experience any emotions. In other cases where we feel emotions when making a moral judgment, emotions constitute our moral concept in the moral judgment when activated occurrently in working memory. Thus, sentiments stored in long-term memory compose all moral concepts, but when a moral judgment is actively rendered, emotions constitute the moral concept in the judgment in

many but not all cases. Hence, Prinz's epistemic emotionism claims that moral concepts are related to emotions dispositionally and at times constitutionally.

Before I turn to the empirical moral psychology evidence that demonstrates the viability of both theory-theory and epistemic emotionism for moral concepts, I need to make two important points. Most concept experiments in the psychology literature have dealt with concrete concepts such as natural and artifact kind concepts, while very few have dealt with abstract moral ones. The only tests that have been conducted in order to explicitly draw concept-based conclusions for moral concepts have been for the prototype view. However, as I will show in the next section, recent findings in empirical moral psychology that examine the causal nature of folk moral judgments may be used to draw concept-based conclusions even though they are not originally designed to do so. Such studies in this literature examine whether, for example, conscious/unconscious reasoning or emotions affect moral judgment. My insight that the causal judgment literature may be used to infer moral concept conclusions will be essential in making the argument against non-cognitivism and subjectivism.

At first it may appear that causation and constitution are two different things. For example, Prinz distinguishes between causation and constitution in the causal moral judgment literature and warns that we cannot reach any constitution conclusions on moral concepts based on causal evidence. He writes, "the fact that emotions influence moral judgments does not entail that moral judgments contain emotions."¹⁴ However, making a moral judgment is an act of categorization, in which a particular moral act is classified as good or bad. In psychology, concepts play a causal explanatory role in functions such as categorization, where concepts are constituted by whatever structure best fills or realizes their role.¹⁵ Thus, if emotions cause moral judgments, then emotions constitute concepts since emotions best fill the causal roles. This is the assumed metaphysical reduction in the concepts literature, which is similar to functionalism in the philosophy of mind and how mental states may be identified with the structure that realizes its functional role, since mental states are members of functional kinds. This application of deriving constitution claims for moral concepts based on causal evidence was not foreseen by those working in the causal moral judgment literature. Thus, they have not realized that such studies have implications for the nature and struc-

ture of moral concepts. However, I will uniquely use such an application of the causal judgment literature here in order to reach conclusions about the nature of moral concepts as well as to argue against non-cognitivism and subjectivism.

Second, it may not be clear whether epistemic emotionism is distinct from other theories of concepts in that emotions may themselves be made up of concepts that together formulate ethical theory knowledge. If this is the case, then epistemic emotionism will not be a different theory from the theory-theory.¹⁶ In the philosophy of emotions, a purely cognitivist theory generally claims that emotions are only constituted by appraisal judgments, which tend to be evaluations related to one's well-being. For example, if someone strikes me in the face, then I experience the emotion of anger. On this view, such anger may be composed of *my well-being has been damaged*, and *his hitting me is morally wrong because it cannot be willed to be a universal law*. If emotions are just appraisal judgments, then in this instance the emotion view may potentially be nothing more than the theory-theory. However, purely cognitivist views have come under attack from psychological findings. For example, Robert Zajonc convincingly argues that emotions can be induced without any prior cognitive mental states such as appraisal judgments. For example, a subject can be made to experience emotions through drugs or hormone treatments without any prior emotion-related appraisal judgments occurring in that subject's mind. Moreover, Zajonc cites empirical evidence for a direct pathway from the retina to the amygdale, an emotional region of the brain, which bypasses cognition regions that are associated with appraisal judgments. For instance, many people have an immediate fear response when we see snake-like coiled objects even before making any cognitive appraisal judgments regarding the snake-like object. Thus, there is strong empirical evidence against purely cognitivist views of emotions, which are untenable.¹⁷

On the opposite end of the spectrum, we may claim that emotions contain no appraisal judgments. If this is the case, then the emotion view is clearly distinct from the other concept theories, and the present issue or worry at hand need not concern us.

However, a third option is a hybrid view in which some but not all emotions contain appraisal judgments as well as some other component(s) essential to all emotions, such as a felt qualitative "what it is like" component, a somatic component where emotions are perceptions of bodily changes, or an action-tendencies component where emotions are dispositions to act. Such a view may be problematic in

that emotions at times may once again be theories, since emotions in some instances are in part constituted by appraisal judgments. But if such a hybrid view is true, then at times an emotion is a conjunction of an appraisal judgment and some other factor(s): x . For the sake of the discussion in this chapter, I need not specify what x is. Thus, according to this theory of emotions, the emotion view differs from the other concept theories due to x , which the concepts that are not composed of emotions do not have. In this respect, emotion-view concepts in some cases have theory-theory components that are appraisal judgments, but they are also made up of x . Due to this conjunction, emotions in this hybrid view still will be different from theories. Appraisals may in part constitute emotions, but emotions cannot constitute appraisals. This difference transcends the worry at hand as to whether epistemic emotionism is still a different theory of concepts from the others, regardless of whether emotions are this specified type of hybrid or whether they contain no appraisal judgments at all.

EMPIRICAL MORAL PSYCHOLOGY

I will now turn to the famous trolley problem experiments in order to demonstrate the viability of both the theory-theory and epistemic emotionism for moral concepts.¹⁸ In the lever case of the trolley experiments, imagine that a train is about to run over five people and you may pull a lever to divert the train on a side track in order to save them – but if you do so, there is one person on the side track who will be killed. According to 89 per cent of participants, you ought to pull the lever in this scenario. In the footbridge case, imagine that the same train is heading toward the same five people, but now you are on a footbridge over the track. In your company is a heavyset man whose body mass is large enough to stop the train if you kill him by pushing him on to the track in order to save the five. In this case, 89 per cent of participants state that one should not push the heavyset man.¹⁹

Joshua Greene interprets the trolley cases as a matter between act utilitarianism and deontology.²⁰ Studies show that in the lever case most participants make act-utilitarian judgments in which it is permissible to pull the lever in order to save a greater number of lives, while in the footbridge case most subjects make Kantian deontological judgments in which the heavyset man has an individual right not to be pushed regardless of the greater utility that will come from pushing him.²¹ Act utilitarianism generally states that one must per-

form the action that brings the greatest overall happiness. In the lever case, making the train switch tracks brings the greatest happiness because it saves more lives. Deontology is generally concerned with individual rights that hold regardless of the overall consequences. In the footbridge case, for most subjects, the heavyset man's right to life is maintained regardless of the consequences of saving more lives by pushing him onto the track. Using brain neuroimaging scans, Greene concludes that utilitarian judgments, such as those in the lever case, are associated with reasoning regions of the brain such as the dorso-lateral prefrontal cortex and inferior parietal lobe. Moreover, deontological judgments, such as those in the footbridge case, involve greater activation in the emotion areas of the brain such as the posterior cingulate cortex, the medial prefrontal cortex, and the amygdala. Thus, Greene believes in a dual-process view in which reasoning factors lead to utilitarian judgments while emotional factors lead to deontological judgments. Unbeknownst to Greene, this means that moral concepts may include both theory-theory and epistemic emotionism structures, depending on the situation at hand. If Greene is correct in his analysis concerning the causal factors in the lever and footbridge cases, then there is evidence that moral categorization uses both the theory-theory and the epistemic emotionism concept structures.²²

In *The Emotional Construction of Morals*, Prinz challenges Greene by arguing that the emotion regions of the brain are still activated in a small way when participants decide to pull the lever. Though such activation is not as extensive as that during the deontological judgment, it is still there. Thus, he interprets participants' decision to pull the lever as an emotion-based decision mixed with rational deliberation due to the large activation of reasoning regions of the brain. In essence, Prinz believes that the emotions are casually most fundamental in influencing judgment. However, the brain scans run by Greene et al. show correlation rather than causation. Thus, even though the emotion regions of the brain for participants in the lever case are activated in such judgments, they do not cause them. With only correlational data, the emotional activation may come after rather than before the judgment is made. This denial of causation from merely correlational data also holds for any reasoning or emotion causal claims for the trolley cases based merely on neuroimaging studies. However, I now turn to further studies on the trolley cases that do show causation and that will be able to address Prinz's counter-interpretation of this set of trolley cases.

Mario Mendez and his associates have run trolley studies on patients with frontotemporal dementia, which involves a deterioration of the ventro-medial prefrontal cortex and anterior temporal emotion areas of the brain.²³ These patients have been found to not only show diminished concern for others but they also exhibit emotional blunting or severely diminished emotions. Due to emotional blunting, such patients are prone to committing transgressions such as stealing and physically harming others. Along the same lines, in *Descartes' Error*, Antonio Damasio similarly concludes that patients with lesions to the ventro-medial prefrontal cortex have intact reasoning capacities but have affective deficiencies.²⁴ For instance, Damasio describes the case of one of his patients who scored normally and at times above normal on intelligence and reasoning tests, but exhibited diminished emotions. When he discusses his many hardships the subject displays an unusual emotional detachment from them, with no sign of frustration or sadness. Moreover, when shown visually stimulating and emotionally charged pictures of people drowning and individuals in gory accidents, the patient showed no emotional response and remained emotionally neutral. This patient's everyday life was generally characterized as one of disaffection, which is different from life before damaging the ventromedial prefrontal cortex.

Michael Koenigs et al. and Elisa Ciaramelli et al. have successfully replicated Mendez et al.'s study with patients that also have lesions in the ventro-medial prefrontal cortex.²⁵ In Mendez's work, patients with frontotemporal dementia were given the lever case and the footbridge case. In the lever case, patients' responses matched those of subjects without frontotemporal dementia. For example, most patients stated it is permissible to pull the lever. However, in the footbridge case, patients significantly diverged from the answers from other subjects and stated that it is permissible to push the heavyset man onto the track. With blunted emotions, patients with frontotemporal dementia were more inclined to make utilitarian judgments, while those without were not. This study provides causal evidence that in certain cases, act-utilitarian reasoning influences moral judgment. After all, patients with blunted emotions made the same judgments as those without in such cases, which suggests both types of subjects primarily use the act-utilitarian principle in making moral decisions. Here, there is still the possibility that emotions can influence judgment. But by inference to the best explanation, the best account of these findings is that even if reasoning and emotions are both involved in the lever case, reasoning

is the primary driving force due to the fact that some subjects had diminished emotions. However, since such subjects diverged from other participants in the footbridge case by making act-utilitarian rather than deontological categorizations, emotions play a causal role in making judgments for normal subjects in the footbridge case. Emotionally blunted patients did not make the same judgments as other subjects in the footbridge case, which suggests that those subjects are primarily influenced by emotions when making such categorizations. Now, reasoning may also play a role in footbridge case categorizations for such subjects, but by inference to the best explanation I infer that emotions primarily drive such judgments in this circumstance.

Mendez et al.'s study repudiates Prinz's interpretation that utilitarian judgments in the lever case are primarily emotion based, since utilitarian reasoning primarily influences such judgments. Second, this study suggests that the theory-theory and epistemic emotionism are both at work in different circumstances of moral judgment. Since, for subjects without frontotemporal dementia, in the lever case utilitarian reasoning primarily influenced judgments, while in the footbridge case emotions primarily influenced judgments, both types of structures are primarily at work at different times. Thus, in some cases, moral concepts in moral judgments have primarily theory-theory rather than epistemic emotionism structure. Hence, non-cognitivism and subjectivism are false, because it is not the case that all moral judgments are primarily the expression of our emotions. If all moral judgments express emotions, then the moral concepts that constitute such judgments must primarily have epistemic emotionism structure. However, at times moral concepts in judgments primarily have theory-theory structure, which suggests that non-cognitivism and subjectivism are not true. On a final note, this conclusion also establishes the viability of the theory-theory for moral concepts – a new insight that has importance in the philosophy of mind and the philosophy of cognitive science.

NOTES

- 1 A.J. Ayer, *Language, Truth and Logic* (New York: Dover, 1952).
- 2 C.L. Stevenson, "The Emotive Meaning of Ethical Terms," *Mind* 46 (1937): 14–31.
- 3 Simon Blackburn, *Ruling Passions* (Oxford: Oxford University Press, 1998).

- 4 Ibid., 70.
- 5 Subjectivism is described in Russ Shafer-Landau, *Moral Realism* (Oxford: Oxford University Press, 2003), 18–19.
- 6 Concepts will be written in italics from this point forward. Second, assuming Bernard Williams' notion of thick moral concepts, *killing* may be considered a moral concept as well.
- 7 W.V.O. Quine, "Natural Kinds," *Naming, Necessity, and Natural Kinds*, ed. S.P. Schwarz (Ithaca, NY: Cornell University Press, 1977), 155–75.
- 8 By *knowledge* I mean an information-carrying mental state rather than justified true belief.
- 9 Susan Carey, *Conceptual Change in Childhood* (Cambridge, MA: The MIT Press, 1985); Gregory Murphy and Douglas Medin, "The Role of Theories in Conceptual Coherence," *Psychological Review* 92 (1985): 289–316; Frank Keil, *Concepts, Kinds, and Cognitive Development* (Cambridge, MA: MIT Press, 1989); Alison Gopnik and Andrew Meltzoff, *Words, Thoughts, and Theories* (Cambridge, MA: MIT Press, 1997).
- 10 Keil, *Concepts, Kinds, and Cognitive Development*, 162.
- 11 D.L. Medin and E. Shoben, "Context and Structure in Conceptual Combination," *Cognitive Psychology* 20 (1988): 158–90.
- 12 Carey, *Conceptual Change in Childhood*; Keil, *Concepts, Kinds, and Cognitive Development*.
- 13 For the sake of brevity, I do not examine Prinz's full theory of moral concepts, as it takes him his first three books to articulate his view. Instead, I offer a truncated exposition of his theory of moral concepts.
- 14 Jesse Prinz, *The Emotional Construction of Morals* (Oxford: Oxford University Press, 2008), 28.
- 15 Daniel Weiskopf, "The Plurality of Concepts," *Synthese* 169 (2009): 145–73; "Concept Empiricism and the Vehicles of Thought," *Journal of Consciousness Studies* 14 (2007): 156–83.
- 16 To bypass this dilemma, Prinz holds a controversial view of emotions in which emotions are not constituted by any concepts whatsoever. In what follows, I offer a way to bypass the dilemma at hand without adopting Prinz's controversial view of emotions.
- 17 Robert Zajonc, "On the Primacy of Affect," *American Psychologist* 39 (1984): 117–23.
- 18 Judith Jarvis Thomson, *Rights, Restitution and Risk: Essays in Moral Theory* (Cambridge, MA: Harvard University Press, 1986); J. Greene, R.B. Sommerville, L.E. Nystrom, J.M. Darley, and J.D. Cohen, "An fMRI Investigation of Emotional Engagement in Moral Judgment," *Science* 293 (2001): 2105–8; J. Greene, L.E. Nystrom, A.D. Engell, J.M. Darley, and J.D. Cohen, "The

- Neural Bases of Cognitive Conflict and Control in Moral Judgment," *Neuron* 44 (2004): 387–400.
- 19 J. Greene et al., "An fMRI Investigation of Emotional Engagement in Moral Judgment," J. Greene et al., "The Neural Bases of Cognitive Conflict and Control in Moral Judgment."
- 20 Some interpret this set of trolley problems as a matter of the doctrine of double effect. This issue is inconsequential in that I will show that the lever case is primarily causally influenced by reasoning while the footbridge case is primarily affected by emotions, regardless of whether the two cases are interpreted as an issue of utilitarianism/deontology or the doctrine of double effect. Moreover, while I consider the lever case to be one of act utilitarianism, it is quite possible that some other principle really is at work, such as, "prevent the most harm so long as there is no self-interested cost to oneself." While this possibility is right, for my preliminary purposes I will assume it is one of act utilitarianism. For, as I will show, it will not matter what principle is really at work here, so long as it is some reasoning-based principle rather than an affect-based principle. The assumption of act utilitarianism may later lead to a theory-theory moral concept structural claim. However, if some other ethical theory is really at work, then it still leads to a theory-theory structural conclusion. Thus, though it is uncertain what ethical knowledge is in play in the lever case, this fact is inconsequential because the viability of the theory-theory structure is still proven to be true.
- 21 J. Greene et al., "An fMRI Investigation of Emotional Engagement in Moral Judgment," J. Greene et al., "The Neural Bases of Cognitive Conflict and Control in Moral Judgment."
- 22 In his 2001 study, Greene also believes he shows that there is a longer reaction time for making utilitarian judgments than for deontological ones. Given that a longer reaction time is likely for cognitive processing of running a utilitarian calculation, Greene says such evidence shows that utilitarian judgments are caused by cognitive theoretical information. However, the evidence really shows that there is no reaction time effect. In the study, a reaction time effect was only generated by including the reaction times of studies that did not require a utilitarian analysis to come into effect. Such studies skewed the speed of fast deontological judgments. J. McGuire, R. Langdon, M. Coltheart, and C. Mackenzie, "A Reanalysis of the Personal/Impersonal Distinction in Moral Psychology Research," *Journal of Experimental Social Psychology* 10 (2009): 577–80.
- 23 M.F. Mendez, E. Anderson, and J.S. Shapria, "An Investigation of Moral Judgment in Frontotemporal Dementia," *Cognitive and Behavioral Neurology* 18 (4, 2005): 193–7.

- 24 Antonio Damasio, *Descartes' Error* (New York: Penguin Books, 1994).
- 25 M. Koenigs, L. Young, R. Adolphs, D. Tranel, F. Cushman, M. Hauser, and A. Damasio, "Damage to the Prefrontal Cortex Increases Utilitarian Moral Judgments," *Nature* 446 (2007): 908–11; E. Ciaramelli, M. Muccioli, E. Ladavas, and G. di Pellegrino, "Selective Deficit in Personal Moral Judgment following Damage to Ventromedial Prefrontal Cortex," *Social Cognitive and Affective Neuroscience* 2 (2007): 84–92.

12

Educating for Truthfulness

DOUG BLOMBERG

The challenge of the Truth Matters conference call to "reclaim truthfulness for the academic enterprise" underscores that a commitment to truth is not an abstract principle but a concrete action. As Plato recognizes, philosopher-rulers need not only "the ability to grasp eternal and immutable truth" but also certain "qualities of character"; in describing these, he begins with "love of the knowledge that reveals eternal reality" and follows immediately with "truthfulness" – for how could "a love of wisdom and a love of falsehood" possibly coexist in one person?¹ Character thus connotes integrity, because virtuous traits are complementary and coherent.

The Apostle Paul shares this concern with truthfulness and its integrality with concomitant virtues, not of course as qualities of an elite, but as characteristics of all the saints. Paul, more clearly than Plato, is motivated by concern for others than by a theoretical vision of abstract ideals: "Do not lie to each other, since you have taken off your old self with its practices."² Truthfulness is a quality not of isolated moral heroes but of members of a community, for whom Paul's purpose is that they may be "united in love ... in order that they may know the mystery of God, namely, Christ, in whom are hid all the treasures of wisdom and knowledge."³ And while Paul agrees that truthfulness cannot flourish apart from the virtues that complement it, what confers integrity is love – not of knowledge, as for Plato, but of God and neighbour.⁴ Relinquishing "the old self" is not a matter of obeying the rational charioteer, of dialectical engagement until one attains an intellectual vision of the Good, but of willfully and will-