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Abstract

In this article I ask what recent moral psychology and neuroscience can and can't claim to have discovered about morality. I argue that the object of study of much recent work is not morality but a particular kind of individual moral judgment. But this is a small and peculiar sample of morality. There are many things that are moral yet not moral judgments. There are also many things that are moral judgments yet not of that particular kind. If moral things are various and diverse, then empirical research about one kind of individual moral judgment doesn't warrant theoretical conclusions about morality in general. If that kind of individual moral judgment is a peculiar and rare thing, then it is not obvious what it tells us about other moral things. What is more, it is not obvious what its theoretical importance is to begin with—that is, why we should care about it at all. In light of these arguments, I call for a pluralism of methods and objects of inquiry in the scientific investigation of morality, so that it transcends its problematic overemphasis on a particular kind of individual moral judgment.

Keywords

moral psychology, neuroscience, moral judgment

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1. Introduction

In recent years scientists have devoted increasing efforts to the study of morality. As neuroscientist Moll and colleagues (Moll, de Oliveira-Souza, and Eslinger 2003, 299) say, "morality has been at the center of informal talks and metaphysical discussions since the beginning of history. Recently, converging lines of evidence from evolutionary biology, neuroscience and experimental psychology have shown that morality is grounded in the brain." In this article I ask what exactly this new science of morality can and can't claim to have discovered about morality; what it can and can't tell us about morality on the basis of the work it has done.

I argue that the object of study of much recent work is not morality but a particular kind of individual moral judgment. Most data and analyses are about something very specific: an individual's judgment about the rightness, appropriateness, or permissibility of an action made in response to a stimulus at a particular point in time. But this is a small and peculiar sample of morality, whose incidence in people's actual moral lives is uncertain. As I show in some detail, there are many things that are moral yet not moral judgments. There are also many things that are moral judgments yet not of that particular kind. If moral things are various and diverse, then empirical research about one kind of individual moral judgment doesn't warrant theoretical conclusions about morality in general—that is, *morality's* nature, functioning, origins, causes, or effects. If that kind of individual moral judgment is a peculiar and rare thing, then it is not obvious what it tells us about other moral things. What is more, it is not obvious what its theoretical importance is to begin with—that is, why we should care about it at all.

Thus, my arguments raise questions about the theoretical meaning and value of research about individual moral judgment. My claim is not that the numerous new experimental findings about this object will necessarily turn out to be inconsequential or useless—that we can't know at this point. But at present it's not very clear what larger conclusions follow from them, nor what their implications for a scientific theory of morality are, much less what their practical or policy implications might be (if any). In this respect, the literature is rife with questionable claims and non sequiturs. Indeed, several recent articles seem unaware of the crucial distinction between individual moral judgment and morality. For example, they may report findings about the former, then present conclusions about the latter; or, they may freely move back

and forth between the two, as though it were an unproblematic step (e.g., Forbes and Grafman 2010; Kvaran and Sanfey 2010; Mendez 2006, 2009). Similarly, they may contain problematic argumentative transitions from moral judgment to the ambiguous "moral decision-making."

The article is organized as follows. In section 2, I identify what I call "moral judgment–centric approaches" (MJA)—that is, research approaches that have individual moral judgment (MJ) at their methodological center. Then, in section 3, I spell out my claim that MJ is a peculiar moral thing and there's much moral life beyond it. This includes questions, thoughts, exhortations, narratives, and values or dispositions. The moral goes beyond the right and the permissible and includes the good, the virtuous, and the supererogatory. It also goes beyond the issue of what to do and includes the issue of what to be. In section 4, I contrast MJ with actual actions and decisions—"actual" as opposed to judgments about actions and decisions. Next, in section 5, I distinguish between thick and thin-moral concepts, and I argue that MJA unwarrantedly neglect the former. In section 6, I summarize my arguments and try to meet two objections to them. To conclude, I argue for a pluralism of methods and objects of inquiry in the scientific investigation of morality, so that it transcends its problematic overemphasis on a particular kind of individual moral judgment.

Finally, let me underscore that my claims apply only to work whose methodological approach is moral judgment-centric. It seems clear to me that this is the new science of morality's dominant approach, or at the very least a widespread and influential one. However, it's also indubitable that not all scientists of morality are alike: there is diversity in their research questions, interests, methods, and assumptions, some of which stem from their diverse disciplinary backgrounds. Alas, doing justice to these various diversities requires more space than I can afford here. In my defense, I'm not trying to offer a comprehensive review of research on morality (for recent ones, see Haidt and Kesebir 2010; Suhler and Churchland 2011) but to identify one widespread and influential approach.[1]

[1]Future research should quantify the incidence of this approach—for example, through a content analysis of a sample of published journal articles. But I think anyone familiar with the literature will agree that it's a widespread one.

2. Moral Judgment

Scientists of morality have done a great deal of research that revolves around individuals making moral judgments.[2] Subjects may be in the lab, inside the scanner, or at home on their computer. In most studies they are healthy (or "normal") persons, but in some they have brain damage or a psychiatric condition. In a few studies their brain's activity or chemistry has been manipulated (e.g., Crockett et al. 2010; Tassy et al. 2012; Young et al. 2010), but in most it hasn't. The subjects' task is to make a moral judgment about statements or situations they are presented with. For example, Moll and colleagues "used fMRI to explore brain activation patterns related to a simple moral judgment task":

> Subjects were scanned during the auditory presentation of short statements and were instructed to silently make categorical judgments (right *vs* wrong) on each. Some statements had an explicit moral content (We break the law if necessary, The elderly are useless), while others were factual statements without moral content (Stones are made of water, Telephones never ring). When the moral condition was contrasted to the factual one, the FPC [frontopolar cortex] and the medial frontal gyrus (Brodmann's areas 9/10) were consistently activated across subjects. (Moll, de Oliveira-Souza, and Eslinger 2003, 301)

Instead of eliciting judgments about moral statements, other studies elicit judgments about moral dilemmas. That is, subjects are presented with a situation where two or more courses of action are possible, or, more often, a situation where the two alternatives are doing a certain thing or abstaining from doing it. Then, subjects are asked questions such as "Would it be permissible for person A to do action X in situation S_1?" "Would it be okay for you to do Y in S_2?" or something along these lines. These answers are their moral

[2]That "a great deal" of research on morality has taken that form doesn't mean, of course, that no other forms exist. One type of experimental study focuses on altruistic or prosocial behavior, building on the traditional literatures in psychology on helping (especially strangers) and in game theory and economics on cooperation, reciprocity, altruism, fairness, and trust (and, more recently, their neurobiology—cf. Knoch et al. 2008, 2010; Zak, Kurzban, and Matzner 2004). In another type of study, subjects' brains are scanned while they look at pictures "with and without moral content" (Moll et al. 2002, 2730; see also Harenski et al. 2008; Harenski, Kim, and Hamann 2009). Yet another type measures facial motor activity—for example, "the activation of the levator labii muscle region" that is "associated with violations of the norm of fairness" (Chapman et al. 2009, 1223).

judgments. For example, "It is not permissible for A to do X in S_1" is a subject's moral judgment.

The most famous of these moral dilemmas is the "trolley problem," originally crafted by philosopher Philippa Foot (2002). Indeed, there's a science of it named, more or less tongue-in-cheek, "trolleyology" or "trolley-ology" (Appiah 2008, 89; Pinker 2008; earlier R. M. Hare [1981, 139] called it the "sport" of "playing trains"). Judith Jarvis Thomson describes the problem thus:

> Some years ago, Philippa Foot drew attention to an extraordinarily interesting problem. Suppose you are the driver of a trolley. The trolley rounds a bend, and there come into view ahead five track workmen, who have been repairing the track. The track goes through a bit of a valley at that point, and the sides are steep, so you must stop the trolley if you are to avoid running the five men down. You step on the brakes, but alas they don't work. Now you suddenly see a spur of track leading off to the right. You can turn the trolley onto it, and thus save the five men on the straight track ahead. Unfortunately, Mrs. Foot has arranged that there is one track workman on that spur of track. He can no more get off the track in time than the five can, so you will kill him if you turn the trolley onto him. Is it morally permissible for you to turn the trolley?
>
> Everybody to whom I have put this hypothetical case says, Yes, it is. (Thomson 1985, 1395)

Thomson doesn't elaborate on her data and methods, so the extension of "everybody" is unknown. However, her results have been corroborated by more recent experimental studies. Most subjects to whom this hypothetical case has been put do indeed say, "Yes, it is." Furthermore, psychologists and neuroscientists have conducted experiments using many other moral dilemmas, some of which they drew from the ethics literature and some of which they expressly designed to manipulate variables of interest. For instance, Thomson's (1985, 1402, 1409) "loop" and "fat man" variants on the trolley problem;[3] more recent reformulations by Hauser and Mikhail (Hauser et al.

[3]This is Thomson's (1985, 1409) "fat man" variant, to which I return below: "Being an expert on trolleys, you know of one certain way to stop an out-of-control trolley: Drop a really heavy weight in its path. But where to find one? It just so happens that standing next to you on the footbridge is a fat man, a really fat man. He is leaning over the railing, watching the trolley; all you have to do is to give him a little shove, and over the railing he will go, onto the track in the path of the trolley. Would it be permissible for you to do this?"

2007, 6; Mikhail 2008, 82-83); Greene's "crying baby" and "infanticide" dilemmas (Greene et al. 2004); in earlier moral psychology, Kohlberg's (1981) "Heinz dilemma" and "the captain's dilemma"; and Haidt's ingenious cases (although not dilemmas) about sex among siblings, eating one's dog, or wiping the toilet with a national flag (Haidt, Koller, and Dias 1993; Schnall, Haidt, et al. 2008; Wheatley and Haidt 2005).

The research questions that these studies have sought to address are diverse, but some of the main ones are as follows. What brain areas are "activated," "recruited," "implicated," "responsible for," or "associated with" making moral judgments? What brain areas or circuits "subserve" particular kinds of moral judgments (e.g., deontological and consequentialist ones)? What are the neural "correlates," "basis," "foundations," "underpinnings," or "substrates" of moral judgment, decision making, and emotions? What are the specific functional roles of specific brain areas (Blair 2007; Cope et al. 2010; Forbes and Grafman 2010)? What causes individuals' moral judgments: hot intuition, affect, and emotion or, rather, cold reason and reasoning (Haidt 2001; Huebner, Dwyer, and Hauser 2009; Narvaez 2010; Paxton and Greene 2010)? Is there a moral faculty, organ, or universal grammar comparable to the language faculty, organ, or universal grammar (Dwyer, Huebner, and Hauser 2009; Mikhail 2007)?

What is common to most of these research projects, though, is that individual moral judgment is at their methodological center. What subjects do is to make moral judgments. What researchers account for, predict, and find neural correlates of are moral judgments. Indeed, the focus is not just on moral judgment, but on a specific kind of moral judgment, which I refer to as MJ. Its prototypical features as found in this literature are as follows:

1. A moral judgment is made by and is an attribute of one individual.
2. It's made in response to a specific stimulus.
3. The stimulus is an imaginary situation and a question about it.
4. The judgment is about an action (rather than, say, a person or state of affairs).
5. A moral judgment is a statement (indicative mood).
6. It is in essence an utterance or speech act (even if not in fact uttered).
7. It makes use of "thin" ethical concepts only (okay, appropriate, permissible, acceptable, wrong, etc.).
8. It's fixed, settled, verdict-like.

9. It's clear (not conceptually or semantically muddled, incoherent, etc.).
10. It's made at a specific, precise, discrete point in time.[4]

I argue that MJ is a peculiar kind of moral thing and, hence, not a good sample of moral things. It's one among the many moral things that are part of people's moral lives. I further argue that there's no reason to suppose that all of the members of the moral class work the same way. It follows that investigations about MJ—what I call MJA—don't have the resources to make claims about the nature and functioning of morality as a whole. Evidently, what is and isn't part of people's moral lives is an empirical question, not an armchair one. Furthermore, it can't be answered unless you specify what persons, because this seems to vary from society to society, as well as across historical periods, social classes, ages, genders, and many other variables. It's also an empirical question whether, given a group of people, MJ is a relatively small part of their lives, or rather is a large or the largest one. My aim here is simply to make some suggestions as to what other moral things there might be besides MJ. Future work—empirical investigations and retrospective reviews—should put my suggestions to test and specify where, to whom, and to what extent they apply (if at all). At this stage, plausibility is their main test.

So, what else might there be? Two kinds of things: (1) things that are moral or reasonably called "moral" yet not moral judgments and (2) things that are moral judgments yet not of the particular MJ kind—that is, they don't meet one or more of the above ten conditions (see also Putnam 2004, 72-74). In the next section, I suggest some distinctions that compare and contrast the MJA picture with what it leaves out of sight. Even before the empirical evidence comes in, I believe that leaving these things out of morality by *fiat*,

[4]Four additional features do not apply to the whole class of moral judgments, but only to a subclass—namely, judgments made in response to dilemmas:

11. The imaginary situation is unrealistic.
12. It presents a choice between (usually two) courses of action or between action and inaction.
13. It's about a future action.
14. The subject of the choice is either an imaginary person or the experimental subject herself (in which case she is asked to imagine what she would do, or what would be appropriate for her to do, if she found herself in such a situation).

without a convincing argument, is unacceptable. But this is precisely what MJA have done.

Lastly, note that my foremost concern is not with the familiar issue of validity in general and ecological validity in particular—whether individual moral judgment in the laboratory generalizes to individual moral judgment outside the laboratory (although I have some things to say about ecological validity, too). Rather, my foremost concern is with moral things that are not covered by the concept of individual moral judgment at all. They seem to me to be other sorts of objects, utterances, acts, processes, or phenomena altogether. In MJA, they are just not there.

3. Beyond Judgment

3.1 Questions, Exhortations, and Narratives

In recent empirical work, MJ is conceived of as a declarative sentence. I argue that moral questions and exhortations are different from judgments in theoretically important respects. Consider these three types of sentences:

1. Declarative: It is morally permissible/right for *A* to Φ.
2. Interrogative: Is it morally permissible/right for *A* to Φ? / What ought *A* to do, morally speaking?
3. Imperative: Φ! / You must/ought to Φ!

Not only is MJ conceived of as a declarative sentence in the indicative mood, such as sentences of type 1. I think it's also assumed that moral judgments are in essence utterances or speech acts (for an explicit articulation of this assumption, see Joyce 2006, 2008, 248-249). Even if in practice subjects check boxes, push buttons, or left-click, they would be prepared to utter something like (1) under the appropriate speech act conditions (cf. Dennett 1982, 162).

I argue that, besides judgments, one component of people's moral lives may be questions, including but not limited to questions such as (2). These questions people pose to and about other people in ordinary conversations and personal ruminations and, perhaps more important, to and about themselves. Moral questions may or may not lead to answers, such as the MJ that the experimenter's or survey researcher's question leads to. Sometimes they may remain unanswered yet still function as tentative guides to thought and action, because they suggest what's important, worrisome, or worth thinking

about. Or they may remain unanswered without really guiding anything—just obstinately live on in one's mind. Phenomenologically, the experience of having or posing or struggling with a moral question is arguably a distinct one, and surely much unlike uttering a moral judgment. Thus, moral questions are a distinct kind of moral phenomenon worth attending to in and of themselves.

Consider a few more concrete examples. Should I regularly give money to charity? Why would I not eat meat if I like it? Why would someone who likes eating meat not eat it? Is it wrong for me to have an abortion? Is she a good spouse? Why am I doing what I'm doing with my life? What's really important to me? Is life fair to me? Is he such-and-such kind of person? These examples may be unrealistically neat, though. I suspect that people's actual moral questions tend to be more confusedly formulated, use fuzzy words and concepts, or contain contradictions. They rarely resemble the neat and tidy form of the questions to which MJ answers.

Their unrealistic tidiness notwithstanding, let's still look at my examples. Imagine a person who tries to answer one of these moral questions. The outcome might not be a clear moral judgment either—for example, "It is morally permissible for A to Φ." Instead, she might end up with some thoughts about the question under consideration, perhaps some fuzzy and unorganized thoughts. Unlike MJ, their realization in her mind might be spread over a period of time. And they don't necessarily amount to a definite answer. In other words, besides the reasonable distinction between "moral deliberation" and "moral verdict" (Borg et al. 2011), my question is about the actual incidence of verdicts or "commitments to one moral conclusion." In any case, for want of a better label, the whole process could be called "moral thinking," even though there's much more than thinking to it. Introspective, conscientious, rational deliberation about a clearly stated moral question or decision that results in a clear answer or course of action is a special case of moral thinking. It seems that moral thinking is seldom like that.

Moral exhortations—sentences of type 3 above—seem to be yet another kind of empirical phenomenon and work in yet another way. Your saying to your friend, "Don't lie to your spouse!," is presumably based on a judgment, belief, conviction, or feeling to the effect that it'd be morally wrong or bad for her to lie to him (for the sake of the argument, I set aside nonmoral reasons she might have). Besides exhortations, there's also what one might call self-exhortations—for example, "Let me improve this aspect of my life!" or "I really shouldn't do that thing anymore!" They, too, are presumably based

on some sort of judgment to the effect that that is a morally bad thing to have or do.[5]

However, neither exhortations nor self-exhortations seem reducible to or understandable in terms of the judgments that apparently underlie them. For one, as empirical phenomena, exhortations and judgments don't look alike at all. Nor does the first-person experience, phenomenologically speaking. Conceptually, they have a different aim, job, or point; assuming speech, a different speech act. Although exhortations implicitly or explicitly contain theoretical evaluations, their point is practical in a straightforward and unmediated manner: they try to bring about a specific thing. Linguistically, that's what jussive and directive clauses, the imperative and hortative moods, or Jakobson's conative function indicate. Morality—however defined or understood—seems to have to do primarily with practice and action and only secondarily or derivatively with theory about practice and action (more on this below). In this respect, exhortations fare better than judgments, whose practical aim is less direct. Why are moral judgments but not exhortations empirically studied?

Finally, there are narratives. As extensive literatures in sociology, psychology, anthropology, history, and communication have shown, human beings are narrative creatures. People tell stories about themselves and about others, about their lives and identities, about their community, its past and its origins. Don't imagine a movie plot or fairy tale with *dénouement* and all, though: most times these are not full-blown stories but unfinished little stories or bits of them. In either case, some of these stories are moral ones or have moral elements, which express and reflect what people hope and wish for, what

[5]I'm staying here at the level of empirical description: I'm saying that, as a matter of fact, people make moral exhortations to others and to themselves. I'm not making a theoretical argument about the real metaethical nature or true meaning of moral statements. By contrast, prescriptivists maintained that moral statements were in reality commands, even though, "superficially," their grammar didn't resemble that of the imperative mood (Carnap 1935; Hare 1952, 1963, 1981). For his part, Greene (2008, 64) describes certain emotions as "alarm signals that issue simple commands": "the emotions hypothesized to drive deontological judgment are far less subtle. They are, as I have said, alarm signals that issue simple commands: 'Don't do it!' or 'Must do it!'" But, if I understand Greene's argument correctly, this is meant to be a theoretical analysis. That is, the commands "Don't do it!" and "Must do it!" aren't actually uttered by homunculi. They are theoretical tools with which he gives an account of the situation.

individual and collective projects they have, who and what they find good, admirable, despicable, or wicked. Not accidentally, narratives play a key role in socialization, which a series of isolated judgments of right and wrong couldn't possibly have. In Christian Smith's (2003, 64) words, "narratives and metanarratives . . . constitute what is for us real and significant"; they "constitute and direct our lives."

For our purposes, it's important that narratives can't be decomposed or analyzed into a set of judgments, rules, points, arguments, questions, or thoughts. A narrative's meaning is tied to its unity. The meaning of one part depends on its relationship to the meaning of other parts—much like indexicals, networks, and relational properties in general. Some particular types of narratives, such as fables, conclude with a moral or a rule of conduct. Yet, again, it's unclear what the moral's meaning would be were its narrative context to disappear and thus the moral remained as a self-standing sentence. Along these lines, you could argue that *all* real-life moral judgments are embedded in a narrative context—isolated moral judgments never occur or aren't possible at all (cf. MacIntyre 1981). Similarly, you could raise these empirical questions about people's moral lives: Do they go about making independent judgments about things, one after the other? Or, rather, do they go about concocting and telling stories and bits of stories to make sense of things and weave them together, and in the context of which they morally evaluate things? If the latter, how are the findings of MJA to be interpreted? If both, what's the connection between them?[6]

3.2 Beyond Right, Permissible, and Doing

I'd like now to consider what MJA might be neglecting in light of three traditional distinctions in moral philosophy: (1) the right versus the good versus the virtuous, (2) permissible versus obligatory versus supererogatory, and (3) ethics of doing versus ethics of being. As mentioned above, MJ are about what it'd be "okay," "appropriate," "wrong," "morally wrong," "permissible," "morally permissible," or "morally acceptable" for someone to do. These are the concepts that the experimental tasks employ (see Table 1).

[6]Some psychologists have worked on narratives and the self (e.g., McAdams, 2006; McAdams, Josselson, and Lieblich 2006), as well as on political narratives within moral psychology (e.g., Haidt, Graham, and Joseph 2009; McAdams et al. 2008). Still, this work is much less common than the moral judgment–centric approach.

Table 1. Examples of Questions and Scales Used in Experiments

Study	Key concepts	Questions, Scales
Zhong, Strejcek, and Sivanathan (2010, 860)	Moral, immoral	"11-point scale, from –5 (*very immoral*) to 5 (*very moral*)"
Takahashi et al. (2008, 1187)	Moral, immoral; praiseworthy, blameworthy	Two 7-point scales: "–3 = extremely immoral, 0 = neither moral nor immoral, and 3 = extremely moral" and "–3 = extremely blameworthy, 0 = neither praiseworthy nor blameworthy, and 3 = extremely praiseworthy" (in Japanese)
Cushman, Young, and Hauser (2006, 1083-1084)	Permissible	"Is it permissible for Evan to pull a lever . . . ?"
Hauser et al. (2007, 18-19)	Morally permissible	"Is it morally permissible for Denise to switch the train . . . ?"
Harvard's Moral Sense Test	Forbidden, permissible, obligatory	7-point scale from *forbidden* (1) through *permissible* (4) to *obligatory* (7)
Young and Saxe (2008, 1914)	Forbidden, permissible	3-point scale "from completely forbidden (1) to completely permissible (3)"
Haidt (2001, 814), Haidt, Koller,and Dias (1993, 617), Schnall, Haidt, et al. (2008, 1107-1108)	OK, wrong	"Was it OK for them to make love?" "Is it very wrong, a little wrong, or is it perfectly OK for [act specified]?" "How wrong is it for Frank to eat his dead dog for dinner?"
Schnall, Benton, and Harvey (2008, 1220-1221)	OK, wrong, nothing wrong	Two scales: "from 0 (*perfectly OK*) to 9 (*extremely wrong*)" and "from 1 (*nothing wrong at all*) to 7 (*extremely wrong*)"
Cope et al. (2010, 3)	Wrong, not wrong	"Participants pressed one button if they judged the act to be 'wrong' and another button if they judged the act to be 'not wrong.'"
Eskine, Kacinik, and Prinz (2011, 296)	Morally wrong	"14-cm line representing a continuum from *not at all morally wrong* to *extremely morally wrong*"

(continued)

Table 1. (continued)

Study	Key concepts	Questions, Scales
Waldmann and Dieterich (2007, 249)	Should	"Indicate in each case whether a person in the scene should choose to take a proposed action or should refrain from acting"; "scale ranging from 1 (definitely not) to 6 (definitely yes)" (in German)
Borg et al. (2006, 806)	Wrong, would you (action)	"Is it wrong to [action appropriate to the scenario]?" and "Would you [action appropriate to the scenario]?"
Bartels (2008, 411-413)	Would you (action)	"In this situation, would you push him?" and "In this situation, would you smother the baby?"
O'Neill and Petrinovich (1998, 353-354), Petrinovich, O'Neill, and Jorgensen (1993, 468-469)	Would you (action)	"What would you do?" (followed by action options) (in English and Chinese)
Moore et al. (2008, 552)	Appropriate, inappropriate	"Is it appropriate for you to kill this man . . . ?"[a]
Knutson et al. (2010, 381)	Appropriate, inappropriate	7-point scale from "extremely inappropriate" to "extremely appropriate"
Heekeren et al. (2003, 1216; 2005, 889)	Appropriate, inappropriate	"Judge whether the actions described in the sentences were appropriate or inappropriate" (in German)
Greene et al. (2001, 2108; 2008, 1148)	Appropriate, inappropriate	"Is it appropriate for you to smother your child . . . ?"
Greene et al. (2009, 366)	Morally acceptable	"Is it morally acceptable for Joe to push the workman . . . ?"
Tassy et al. (2012)	Acceptable, would you (action)	Two questions that subjects could respond "by yes or no": "Would it be *acceptable* to . . . ?" and "Would *you do* . . . ?" (in French)

a. This is the question's wording as reported in Moore, Clark, and Kane's "Table 1: Text of Sample Dilemmas." However, they also write, "The experimenter read aloud on-screen instructions encouraging subjects to disregard legality and consider only *moral* appropriateness," and "The final sentence asked whether the resolution was *morally* appropriate" (2008, 552; my italics). So, it's unclear if they used the expression "morally appropriate," or just "appropriate," or both.

All these questions try to get at some undoubtedly relevant moral things: rightness, acceptability, permissibility, "okay-ness," and so on.[7] Yet, might they all be missing some other relevant moral things? Perhaps in some societies questions about wrongness and permissibility are prominent in some people's moral lives. The practical significance of the concepts of rightness, wrongness, permissibility, and impermissibility in contemporary Western societies is evident, for example, in their ubiquitous institutional and cultural incarnations. Besides, as a matter of fact, these concepts have had an elective affinity with a particular form: rules or lawlike principles. (Affinity is not necessity, however: moral particularism about rightness and permissibility is a viable position.) In turn, this affinity has facilitated their diffusion.

However, there is a different sort of moral relationship that people can have to things—namely, finding them not morally right but morally *good*, either in themselves or as means to further moral ends. You can say that people are *after* these moral goods, even when they lack a plan as to how to get them and this is a matter of practical sense (Bourdieu 1990). These are things that someone may hold dear; they aren't her mere desires and preferences but things that she finds *worthy* of being had, desired, preferred, sought, cherished, or chosen. People seem to have moral projects, hopes, aspirations, ideals, and commitments where goods and "the good" play the key role. Some examples of goods of diverse types include liberty, truth, knowledge, community, solidarity, faith, health, wealth, honor, pleasure, excellence, love, family, friendship, security, *ataraxia*, work, and self-expression. Furthermore, there is a plurality of goods and conceptions of the good, even within a single moral community, which at times are incommensurable.

Moreover, besides doing what's right and avoiding what's wrong, people may wish to live a good, fulfilling life—live it well, not misspend it. Even if few people pose these questions in the philosopher's fashion, some life projects and commitments might be *really* important to them. Some people might

[7]But do they actually get at those moral things? For example, "acceptable," "okay," "should," and "would you" don't necessarily evoke moral properties. Bartels's question "In this situation, would you flip the switch?" isn't the same as "In this situation, would it be morally right, permissible, appropriate, etc. for you to flip the switch?" For instance, someone can answer that she wouldn't flip the switch, even though flipping the switch seemed to her the morally right thing to do (see also Tassy et al. 2012; cf. Kahane and Shackel, 2010, 566). For a distinction between acceptability and permissibility, see Dwyer (2009). On the effects of wording, see O'Hara, Sinnott-Armstrong, and Sinnott-Armstrong (2010).

even have one project or commitment that is the most important of all—for example, have a family, write a novel, become rich, help the poor, find God, fight against evil, reach a state of contentment and serenity, or bring about the revolution. None of these things are encompassed by the concepts of rightness and permissibility; MJA are blind to them.

Nor do these concepts encompass the moral relationship of admiration and the class of acts known as supererogatory. When presented with morally extraordinary people, acts, or states of affairs, people may feel or express admiration. Consider the lives of the saints and the heroes. Their acts are obviously permissible and obviously not obligatory. But that doesn't help us describe and account for how people seem to react and relate to them. The same can be said about abhorrent, abominable, and despicable acts and people. The experience and social consequences of the morally admirable/heroic and despicable/monstrous don't seem understandable in the same terms as the good/bad, much less the right/wrong. They are not quantitatively more intense but qualitatively different (see Aquino, McFerran, and Laven 2011; Flescher 2003; Kawall 2009; Porpora 2001; Urmson 1958; for a study about admiration, see Immordino-Yang et al. 2009).

I've suggested that MJA miss the good and the supererogatory completely or almost completely. I believe they do not cover, either, people's judgments about character, virtue, and, more generally, what some ethicists call "ethics of being" (e.g., Frankena 1970, 1973; Mayo 1958).[8] It seems that sometimes people's moral judgments, questions, and experiences are not about what to do but about what or how to be. Someone may be referred to as a bad, good, self-absorbed, vain, generous, fair, open-minded, or irresponsible person. Or as someone who has guts, or is depraved, sly, or manipulative, which in turn may become reasons for action (e.g., "I decided not to engage in business with Jones, because he's an irresponsible fellow" or "Try to help him if you can—he's a good man"). Interestingly, these judgments about being are presumably based, inductively, on individual instances of doing. But they are nonetheless not reducible to them. Moreover, there is a sort of stickiness to judgments about being or character, precisely because they are seen as referring to

[8]Again, my arguments are about a methodological approach. On a theoretical level, some scientists of morality sympathize with virtue ethics (e.g., Casebeer, 2003; Haidt and Joseph, 2007). In fact, as Foot (2001, 2002), Hursthouse (1999), and indeed Aristotle illustrate, the most compelling versions of virtue ethics are naturalistic (cf. Annas, 2005).

relatively stable traits or dispositions. Indeed, a judgment about how someone is might shape future instances of judgment about what they do.

In addition, moral judgments and questions about yourself, as well as moral exhortations to yourself, may come in the language of being and character, not in the language of doing. You may hope and strive to be an honest, courageous, pious, or respectful person, without it being possible to translate this into a set of concrete and exhaustive judgments, principles, or action-maxims. Even if you develop some rules of thumb, these are somewhat imprecise and not exhaustive, and their application requires *phronesis* or practical wisdom. You may be upset at yourself for failing to live up to your father's lifelong example of honesty or for failing to do what you think an honest person would do in such circumstances. Your moral self-conception or identity—what kind of person you see yourself as, what kind of person you hope to become, who are your moral heroes and antiheroes—is missed by talk about right, wrong, permissible, and forbidden, which is what MJA investigate. At least for some people, many important moral things *follow* from their identifying themselves as American, African American, Jewish, gay, a woman, communist, conservative, vegan, or what have you. Besides, as a sociological fact, many things follow from your identifying yourself as this or that and from being recognized as such (see, e.g., Aquino and Reed 2002; Burke and Stets 2009; Stets and Carter 2011).

Furthermore, you may be unable (or unwilling) to bracket the fact that moral life and moral action are (1) the moral life and moral action of particular people, which (2) necessarily take place within a context (MacIntyre 1981, 1988; Pincoffs 1971, 1986; Williams 1973). As it has been often observed, agent-neutral ethical theories such as utilitarianism fail to take this into account. So do methodological approaches such as MJA. To return to the example of the trolley problem experiments, without any context (social, cultural, religious, legal), it might be hard for subjects to decide what the right thing to do is, or even to find the question meaningful and see its point at all. "Well, it really, really depends," they may think to themselves. The experiment may still elicit an answer from each subject regarding what the right thing to do is, in the abstract, bracketing all contextual considerations, *ceteris paribus*. But then the interpretation of this answer becomes problematic. In addition, subjects may wonder whether the fat man to be sacrificed for the greatest good of the greatest number is an HIV/AIDS researcher who may discover a cure for it or a ruthless Uruguayan dictator. Not being analytic philosophers, subjects may ask themselves, what in the world does it mean that he is nobody in particular—neither a medical researcher nor a dictator, neither kind nor unkind, neither old nor young?

Finally, in this subsection I've been making some empirical conjectures about ordinary people's moral lives and specifically about whether MJA may be missing some of their components. I have *not* been talking about the academic field of moral philosophy and its normative and metaethical debates. Yet, as my occasional citations suggest, many of my points have *mutatis mutandis* a counterpart in moral philosophy—for instance, if the good ought to have priority over the right, if the "law conception of ethics" is misguided, if Kantians can accommodate the concept of the supererogatory, if utilitarians can accommodate the concepts of identity and integrity. More precisely, many of my points have a counterpart in several strands of criticisms leveled at mainstream analytic ethics (e.g., Anscombe 1958; MacIntyre 1981; Taylor 1985, 1989; Williams 1981, 1985). This is not a mere coincidence. For the conception of morality of the MJA heavily draws on the particular conception of morality that consequentialism and deontology share, yet which is not shared by other traditions. For instance, a pragmatist, existentialist, communitarian, particularist, Buddhist, or virtue ethicist would probably see the disputes between consequentialism and deontology as pointless. Today's scientists of morality have framed their question and modeled their object of inquiry after these two schools, thereby unwittingly taking sides on a substantive issue in ethics.

3.3 Stimuli

Theoretical models of moral judgment are typically diachronic or sequential: they represent a temporal sequence of events. The model has three successive steps. It begins with an individual on one hand and an external stimulus on the other—often called "stimulus" or "event" (Hauser 2006; Hauser, Young, and Chusman 2008), or "eliciting situation" (Haidt 2001; Haidt and Bjorklund 2008). Then, as a result of the stimulus, some things happen within the individual, in her brain. Finally, we get her response, the moral judgment.

Methodologically, experiments are designed in accordance with this model. The stimulus might be a moral statement or a moral dilemma, such as a trolley problem. The response is the subject's response, often by pressing a button, to whether it's morally permissible to turn the trolley. Given this diachronic model, one may draw conclusions on the basis of reaction time or mental chronometry—a traditional measure in psychology (Abrams and Balota 1991; Meyer et al. 1988). For instance, reaction time data may be used to support arguments about the role of emotion in moral judgment, or how "ambiguous" a moral scenario is (Greene et al. 2001; Greene 2009; Heekeren

et al. 2003, 1218; Heekeren et al. 2005; McGuire et al. 2009; Moore, Clark, and Kane 2008, 554-556; Suter and Hertwig 2011; cf. Huebner 2011).

From a practical perspective, this sounds like a sensible method. How else could you study moral judgment experimentally? In fact, this is normal experimental science, in psychology as much as in biochemistry. Be that as it may, a nontrivial assumption has been thereby smuggled into the substance of arguments and theories about moral judgment. Compare moral judgment with the primary emotions and sensory perception (or at least one conception thereof—cf. Noë 2004). It's in the very nature of perception and the primary emotions that they must be triggered by a specific stimulus or eliciting situation. You smell something gross, then some things happen within you, and then your body reacts in a characteristic manner and you experience disgust. A certain pattern of light waves strikes your retinal photoreceptors, then some things happen within you, and then you see either a duck or a rabbit. In these cases, stimuli are necessary antecedents. Consequently, the use of stimuli is largely unproblematic in experimental research on things such as visual perception and disgust (despite a long history of objections—cf. Thurstone 1923).

By contrast, it seems that moral judgment could also occur (1) not as a response to a specific stimulus or eliciting situation at all; (2) as a response to many stimuli over time, many events that are perceived, which somehow accumulate and eventually gel into a definite or more or less definite judgment; or, perhaps more debatably, (3) as a mechanical utterance of a previously formed, familiar moral judgment (unlike disgust, which must be actually experienced each time for it to count as an instance of disgust). I don't have any data about the relative incidence of (1), (2), and (3). Still, my main point is that MJA are underlain by a weighty assumption regarding what moral judgment is: a response to a specific, unique, and unfamiliar stimulus that suddenly appears before you. In this sense, my point parallels that of "resting state" or "default mode" neuroscientists, who object to the view of the brain as driven by environmental stimuli (Callard and Margulies 2011; Raichle 2009).

More generally, people's moral lives don't seem to be satisfactorily described as a series of successive, independent events—namely, a series of responses to specific, unique, and unfamiliar stimuli that suddenly appear before an individual. As Iris Murdoch (2001, 37) put it once (though in a different context): "The moral life . . . is something that goes on continually, not something that is switched off in between the occurrence of explicit moral choices. What happens in between such choices is indeed what is crucial." Yet, for good or for bad, what happens in between such choices isn't the kind of thing for which experimental research methods are particularly apt.

4. Judgment and Action

Probably everybody agrees that morality is directly or essentially tied to practice—that is, people actually moving about and doing things. Therefore, action must have a central place in any scientific account of morality. I suppose that it won't be controversial to suggest that, unfortunately, few science-of-morality projects in the last years have gone beyond "self-reports and finger movements" (Baumeister, Vohs, and Funder 2007). Given that action (especially helping) and the gap between judgment and action were staples of earlier moral psychology (Blasi 1980; Darley and Batson 1973; Isen and Levin 1972; Kohlberg and Candee 1984; Saltzstein 1994; Turiel 2002, 119-151), the scarcity of studies about action in the more recent literature is even more surprising (but see Greene and Paxton 2009; Vohs and Schooler 2008). It's also understandable, though, given a technological constraint: scanners aren't yet portable, so you can't scan people when they're at home or at work, much less driving a trolley or tangoing (but see Aoki, Funane, and Koizumi 2010, 192; Brown, Martinez, and Parsons 2006).

Whatever the ratio of action studies to judgment studies is, let's look more closely at what MJA might tell one about moral action and the extent to which moral judgment might predict action. The first thing to note is the great complexity of the relations between judgment and action, which numerous scholars have shown (Bazerman and Tenbrunsel 2011; LaPiere 1934; Pager and Quillian 2005; Tavory and Swidler 2009). The second thing to note is that not all moral judgments have the same relation to action. Among other things, judgments can differ in their object, subject, reality, and temporality:

1. *Object:* (1) particular actions, (2) classes of actions (or rules, as in rule-utilitarianism), (3) states of affairs, or (4) persons
2. *Subject:* (1) first person, (2) second person, (3) third person, or (4) impersonal pronoun or impersonal construction (e.g., in English, "one," "people," impersonal "it" and "there," passive voice)
3. *Reality:* (1) actual past actions or present choices or (2) imagined action or choice scenarios
4. *Temporality:* (1) past actions, (2) present choices, or (3) future choices

Different permutations of these elements are likely to render judgments of different relationships to action—and different predictive power. For example, compare (1) the sentences "It was wrong of me to tell this lie to my friend as I did yesterday" and "It'd be wrong if I decided to tell this lie to my

friend later today" and (2) the sentences "One ought not to lie to one's friends" and "It is wrong (for one) to lie to one's friends." Aren't the latter further removed from action than the former?

Scientists of morality have made diverse choices regarding object, subject, and temporality. For example, Hauser and colleagues have given subjects versions of the trolley problem in which someone named Denise (or Frank, Ned, Oscar) must choose a course of action. Then they ask questions such as "Is it morally permissible for Denise to switch the train to the side track?" (Hauser et al. 2007, 18; see also Cushman, Young and Hauser 2006, 1083-1084). For his part, Greene has asked his subjects questions such as "Is it appropriate for you to smother your child in order to save yourself and the other townspeople?" (Greene et al. 2008, 1148; see also Moore, Clark, and Kane 2008, 552) Mikhail (2008, 90) observed that the grammatical subject may make a difference and criticized Greene for his choice: "most of [Greene's] dilemmas are presented in the second person," which "presumably raises the emotional index of his scenarios and risks magnifying the role of exogenous factors" (see also Monin, Pizarro, and Beer 2007, 103). More generally, in moral matters the classic asymmetry between first- and third-personal perspectives is crucial—whether the issue is about me or about someone else whom I observe.

Now, perhaps people's "moral values" have a closer relationship to action. While not so frequent a word in recent neuroscience and psychology (Graham et al. 2011), there are well-established research traditions in sociology, political science, and organizational behavior that center on values. Plus, they have well-developed methodological instruments, such as the World Values Survey, which began in 1981. For example, the 2005 questionnaire includes this question: "Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card." The card has a 10-point scale, which goes from "never justifiable" to "always justifiable," and the actions include "abortion," "homosexuality," "divorce," "cheating on taxes if you have a chance," and "someone accepting a bribe in the course of their duties."

This research tradition doesn't view values as events taking place at a particular point in time, the way a person's making an utterance is. Rather, values are more or less stable attributes or features of a person, or dispositions, close to their character, identity, and self-image or self-understanding. Nor does this tradition ask whether morality is driven or caused by emotion or reason or both. Rather, its typical independent variables are education, income, age, gender, religion, beliefs, networks, and all the rest. I won't consider here what values might be, how they differ from judgments, and whether stable

dispositions exist at all (Doris 1998, 2002; Harman 1999; Kamtekar 2004; Sreenivasan 2002, 2008). However, assuming something like values do exist, would they give the researcher a special purchase on moral action? I think not, or not necessarily. In this respect, empirical evidence about values is as problematic as empirical evidence about judgments. Neither has a straightforward connection to action and decision in a natural setting or real-life situation.

More precisely, an experimental subject's judgments or a survey respondent's values don't have a straightforward connection to either of these two distinct kinds of questions: (1) first, questions about real-life judgment, including (1.1) "What would her judgment be if she actually saw someone (e.g., on a footbridge, standing next to a fat man)?" and (1.2) "What would her judgment be about a real-life abortion or tax fraud case (given a certain set of conditions *C*)? (2) second, questions about real-life action, including (2.1) "What would she actually do if she were on a footbridge, standing next to a fat man?" and (2.2) "What would she actually do if she herself had to decide whether to have an abortion or cheat on her taxes (given a certain set of conditions *C*)?"

With regards to point 1, we face an ecological validity issue. Experimental objects and real-life objects are of the same kind or reasonably similar: the general class of moral judgments includes both a subject's judgment about what an imaginary person (or she herself) should do in a certain situation, and a subject's own actual judgment if she happened to face such a situation in her life. But ecological validity is a general methodological issue in experimental science, not one specific to the science of morality. Moreover, ecological validity is corrigible and a matter of degree. What one should consider, though, is whether experimental research on moral judgment is relevantly similar or dissimilar to experimental research on memory, disgust, cognitive biases, auditory perception, or other sorts of judgments. Does the special content of moral judgments—morality's essential ties to practice, for example—pose special ecological validity problems (cf. Casebeer and Churchland 2003, 186-188; Levitt and List 2007)?

Now, with regard to point 2, MJA are powerless. Perhaps in some real-life cases, emotions and gut feelings are stronger and in the predicted direction, so that an *a fortiori* argument may be possible (if this is the case in the lab, then even more so it should be the case in real life). But this surely needn't be so. More generally, I suspect that MJA research findings about blatant moral wrongs are unlikely to tell apart people who do and don't, or will and won't, engage in them. They are more likely to tell apart psychologically pathological from nonpathological wrongdoers. Thus, it seems that the judgments that a subject makes in the lab don't tell the researcher much about moral action,

let alone predict what her actions would be in such situations. As Appiah (2008, 100) points out, "[w]hen I think about the footbridge scenario . . . I'm making a guess about how I'd respond in those circumstances":

> It is an interesting and unobvious assumption, which hasn't had the attention it deserves, that our responses to imaginary scenarios mirror our responses to real ones. Joshua Greene's account of these cases presupposes, in other words, that our intuition about what to do in the imaginary case is explained by the activation of the very mechanisms that would lead us to act in a real one. Without that assumption, his explanation of why we respond as we do fails.

Of course, this is not to say that we can't learn other valuable lessons from these imaginary scenarios. But they don't entitle MJA investigations to make claims about moral action or behavior or decision (unless "decision" just means decision about what judgment to make). In this regard, despite the great practical obstacles, one should gather empirical data on the connection between experimental MJ and survey responses on one hand and real-life judgment and action on the other. For instance, one might resort to systematic ethnographic observation, replication of naturally occurring situations, or, if possible, field experiments. Naturally, it'd be important to take into account the effects of social and cultural variables that have been shown to predict many behaviors, including a person's age, gender, occupation, religiosity, community involvement, where she grew up, and what kind of folks she hangs out with. Naturally, it might turn out that MJ, as elicited in the lab, still has an independent effect. But the connection can't be assumed.[9]

Finally, in this subsection I've considered what MJ experiments and surveys about values tell us about real-life judgment and real-life action. Part of the issue is whether there is a "real-life effect," which is at odds with the research results. It is a distinct issue whether the scenarios and dilemmas are not real but *realistic* (cf. Appiah 2008, 96; Bartels 2008, 394; Knutson et al. 2010). For instance, subjects' judgments about cheating on one's taxes,

[9]In *Moral Minds*, Hauser (2006, 35) defends the use of "artificial examples" thus: "I believe that as long as artificial examples are examined together with real-life cases, we will uncover important insights into the nature of our judgments." I don't understand how exactly they are to be examined together, though, and how they will uncover important insights into the nature of our actions.

cheating on one's spouse, eating one's dog, having sex with one's sibling, or not repaying one's debts seem more realistic than their judgments about trolley problems. Roughly speaking, subjects may relate well to the former; something like that could happen to them (but see Huebner 2011, 58). By contrast, the latter may strike them as weird or fanciful or may fail to fully engage them.[10] I won't pursue here the question of what (if anything) follows from these different degrees of realism. Whatever follows from them, the defender of unrealistic dilemmas could argue that in any case they are a methodological necessity, much like controlled experiments and thought experiments in science and philosophy (see Gendler 1998, 2004). And, surely, the idea of a runaway trolley is not as bizarre as Parfit's teleporter, Schrödinger's cat, Maxwell's demon, Chalmers's zombies, or Putnam's Twin Earth's "water" (on the bizarreness objection, see Sorensen 1992, 277-284). Their opponent may argue that an analysis of isolated factors doesn't make sense in the realm of morality (nor in football—Dancy 2004, 19; Fleck 1979, 46). Or she may argue that, much like in physics, the laws of morality thereby obtained would lie (Cartwright 1983). In any case, my point is simply to warn against the common conflation of the real and the realistic, probably provoked by the ambiguity of words such as "real" and "artificial."

5. Thick and Thin

In this section I provide a different sort of support for my claim that conclusions based on MJA are not about morality but about a small part thereof. As Williams (1985) has argued, there are two kinds of moral concepts: thick and thin ones. Unfortunately, this important distinction has passed unnoticed in recent research on morality in psychology and neuroscience. Unaware of the other kind, MJA have studied thin morality only, as though it were the whole of it (cf. Abend 2011).

How do thin and thick concepts differ? Thin concepts—for example, right, good, and permissible—evaluate an object. But they don't describe it. If you

[10]Heekeren et al. (2003, 1215) sensibly observe that the "emotional salience of a stimulus, the display of violence and/or the dilemmatic character of the scenario" could be confounding factors. Therefore, their experimental task doesn't involve any of these three things to address the problem of realism (though they don't use the word "realism"). In another article (Heekeren et al. 2005, 887), they test the effect of "the presence of direct bodily harm or violence in the stimuli." For their part, Greene et al. (2009, 365) introduce "a method for controlling for effects of unconscious realism."

say, "That action was wrong," you aren't conveying any further information about it, other than its being wrong in your view. Conceptually and semantically, you are free to say that any action is wrong. By contrast, thick concepts—for example, dignity, fanaticism, or moderation—do a dual job. They simultaneously evaluate and describe an object. Take the sentences "That was an brutal action" and "That was a materialistic action." There are semantic constraints on what you can call "brutal" and "materialistic," because these words are describing that action besides negatively evaluating it.

As we saw above, MJ uses thin concepts only: rightness, permissibility, appropriateness, or "okay-ness." While this is an empirical question, it's probably uncontroversial that thick ones appear in some or much of people's moral lives. For example, it'd be impossible to give an account of moral lives, practices, and institutions in contemporary Western societies without concepts such as dignity, decency, integrity, piety, responsibility, tolerance, moderation, fanaticism, barbarism, extremism, despotism, chauvinism, rudeness, uptightness, misery, exploitation, oppression, humanness, hospitality, courage, cruelty, chastity, perversion, obscenity, lewdness, and so on and so forth. Or, to cite Gibbard's (1992, 269) examples, "cruel, decent, nasty, lewd, petty, sleazy, and up tight [*sic*]." In comparison, rightness, wrongness, permissibility, impermissibility, and their relatives seem *prima facie* less prominent. If this is indeed so, then a theory of morality exclusively based on research about thin moral judgments would be inadequate, or at least incomplete. My first point in this section, then, is simple: to encourage empirical research about thick concepts, too. I see no good reason why a science of morality should be a science of thin morality only (for a partial exception, see Zahn et al. 2009).

The second point of this section is to show that thick concepts involve a methodological difficulty that thin concepts may not. Like social psychology and neuroscience in general, a robust science of morality must be based on research in different societies and cultures (Ambady and Bharucha 2009; Ames and Fiske 2010; Arnett 2008; Choudhury 2010; Han and Northoff 2008; Heine and Norenzayan 2006; Henrich et al. 2004; Henrich, Heine, and Norenzayan 2010; Henry 2008; Sears 1986). So suppose you set out to do such research and need to translate your vignettes and questionnaires into the local language. Suppose first that your research is about thin moral judgments, such as "Switching the train to the side track is permissible." The subject of this last sentence, "switching the train to the side track," refers to objects that contingently exist in some societies, such as trains, tracks, and switches. If you were interested in investigating the moral judgments of the Hadza of Tanzania, you'd have to substitute herds of stampeding elephants,

jeeps, and trees for runaway trolleys, switches, and footbridges (Hauser, Young, and Chusman 2008, 135-136; cf. Abarbanell and Hauser 2010, 212; Tassy et al. 2012). But this is not a big deal; these differences across societies aren't moral ones.

The next step is to translate the English words "right," "wrong," "okay," "good," "appropriate," "permissible," and "ought." Are these words translatable into all of the world's languages, without any or much "residue or loss" (Kuhn 1983, 670)? That's a questionable assumption to make—one suggestive example is that even in Spanish, a language that's close to English in many ways, the translation of that moral "okay" is problematic. What is more, besides methodologically, this is a logically troublesome issue (Davidson 2001; Fodor and Lepore 1992; Quine 1960). In any case, it's not a crazy assumption; you may be able to get away with it.

Suppose now that your intercultural research is instead about thick moral judgments. Consider some examples: "That was noble of her," "She is a materialistic person," "She is a person of integrity," "He acted as a chauvinist," "Workers are being exploited," "His behavior is gentlemanly," "His attitudes are feminine," "Giving is humane," and "Giving is pious." Unlike thin moral predicates, the use of (at least some) thick predicates has institutional and cultural preconditions. For example, statements that contain the predicates "[be] materialistic" or "[be] exploitative" presuppose a complex web of institutions, ideas, and practices—including some very specific economic institutions and ways of organizing labor and the production and exchange of goods. If a human group or society doesn't have these things in place, then "She is a materialistic person" can make no sense there. Likewise, moral judgments about what actions are gentlemanly (positive valence) or feminine (negative valence) would be downright unintelligible in societies that lack the institutional and cultural conditions that make gentlemanliness and femininity possible.

Therefore, the assumption that thick concepts are translatable into all of the world's languages is a nonstarter—either because the concept's preconditions may not obtain or because the concept may happen not to exist in that society and language. As a result, intercultural research on thick morality can't take translatability for granted, as its starting point, and go on to administer surveys or run experiments about particular thick concepts—for example, subjects' judgments about moderation, integrity, dignity, piety, oppression, and uptightness in Tanzania or Uruguay. At best, it can assume intercultural intelligibility and work its semantic and conceptual way up, through participant observation, dialogue and interaction, or historical research. Regrettably, this is a case-by-case issue. While a good-enough-for-research-purposes translation or

paraphrase might surface, it can't be guaranteed *a priori*. Future work should analyze whether this is only a practical methodological difficulty or, rather, it has broader implications for the understanding of morality as a hardwired and universal capacity (cf. Sachdeva, Singh, and Medin 2011).

6. Conclusion

In this article I've asked what moral judgment-centric approaches (MJA) in psychology and neuroscience tell us about morality. I've argued that their object of study, MJ, is not a good sample of moral things. There are many things that are moral yet not moral judgments. There are also many things that are moral judgments, yet not of the particular MJ kind (as defined above). If these arguments are correct, it follows that MJA research doesn't license theoretical conclusions about morality in general. Rather, it licenses conclusions only about the specific moral object that it has actually investigated. To be sure, many suggestive experimental findings about this object have been reported. But I don't think enough thought has been given to what to make of them theoretically, what social phenomena they illuminate, what neural correlates are correlates *of*, or what to do with these findings to build a satisfactory understanding of morality. To be sure, the new science of morality is still in its infancy. But that doesn't make unwarranted or unclear claims any more acceptable.

To conclude, I wish to consider three kinds of response to my arguments. Two of them are objections. For expository convenience, I have two fictional persons raise them: Pedro and Jones. I'll try to meet these objections, and then I'll argue that a third response should be favored: Pelusa's pluralism.

> *(1) Pedro's response*: "I accept your claim that much recent research in moral psychology and neuroscience is about a particular kind of moral object, MJ, which is but a small and peculiar part of morality. But it's the most scientifically important or valuable part. And because it's the most important or valuable part, it's the best place to start. Future work will study the other parts that you show have been left out, which besides aren't as easily empirically tractable as MJ."

Pedro concedes that MJA research entails no conclusions about morality *simpliciter* or how morality works, much less about people's moral behavior or society's moral problems and institutions. He forsakes all of these aims—at least for the moment. But then it becomes a nontrivial question for him

what MJA research *does* entail conclusions about. If MJ is a small and peculiar part of morality, then what else, exactly, does scientific research about it illuminate or will eventually illuminate? And how can it reach other parts of morality? I think the burden of proof here is on Pedro. Otherwise, wouldn't the science of morality thus conceived be theoretically and practically toothless? Why should anyone care about that peculiar object of study at all?

Pedro's rejoinder might be that MJ is scientifically important in and of itself, intrinsically, independent of whether it does or will illuminate other moral things, moral behavior, moral life, and so on. What is its importance due to? I believe that he can give three answers here. First, MJ may be important because it's empirically common in people's actual lives. This empirical conjecture seems to me highly unlikely, at least in the societies and groups I'm familiar with. Yet, in any case, the burden of proof is again on Pedro to provide the apposite sociological evidence. I'm not aware of any such effort, which would require quite time-consuming data collection.

Second, MJ may be important because it reveals the real essence, core, or deep structure of morality—that which is most basic or fundamental from a scientific point of view. Moral goods and the good, the supererogatory, moral questions, thick concepts, the ethics of being, and actual behavior are a different matter. In fact, Pedro might add, from a scientific perspective they are secondary or derivative or not essential. My view, however, is that there are forceful objections that apply to this kind of argument for MJA. Specifically, to its conception of essence in general and the essence of morality in particular—what is constitutive of the object and what is not (e.g., Coulter 2008; Gold and Stoljar 1999; Hartfield 2000; Noë 2004, 2009; Slaby 2010; Taylor 1989, 2003, 315; Vidal 2009). Moreover, certain cultural and institutional elements are *presupposed* by morality (or at least some of it), so this sort of essentialism may be unintelligible (Abend 2011). Even setting fancy philosophy aside, it sounds intuitively implausible that moral practice could be less essential than or ancillary to moral judgment and its neural correlates. In brief, Pedro can't take for granted the essential status of MJ—he would need to make an argument to that effect and confront head-on those objections.

Third, Pedro may argue that all of the other moral things are analyzable into, explainable in terms of, or reducible to MJ. They are just more complex or higher-order things. And that's why MJ is the most important moral object; individual moral judgments are the basic micro-units or building blocks of morality. If so, Pedro owes us at least a rough logical and methodological roadmap as to how his ambitious plan may proceed—that is, how to

get from here to there, from MJ to the rest of morality or moral life, from the right to the good, from judgments to questions, from the permissible to people's hopes and projects. How exactly are the building blocks of morality building blocks? As the previous sections suggest, I suspect that such analysis isn't possible, partly because of the heterogeneity of the class of moral things and the complexity of morality as an *explanandum* (cf. Mitchell 2003, 2009). While I won't try to develop this suspicion here, my point is that Pedro's third argument depends on whether his ambitious analysis or reduction works—which hasn't been attempted yet.

Finally, the claim that some object or task will be taken up later doesn't vindicate or justify the choice of what is being taken up today. True, you must start somewhere. But you still need a good reason as to what's important or valuable enough to start with it and why that object or task is important or valuable. Differently put, why your priority ought to be a priority. Likewise, that an object of inquiry is empirically tractable, given technical or financial constraints, is a good *pro tanto* reason to study it rather than something else (whose study might be too expensive or time-consuming). But it's surely not a sufficient reason. It's generally a weightier consideration whether its investigation can yield important or valuable results, either for theory, or practice, or both. By itself, tractability will only take you so far.

> *(2) Jones's response*: "Those other allegedly 'moral' things that you discuss are not what morality *really* or *truly* is, and hence not within the real or true extension of the English word 'morality.' Morality is really about judgments and principles about right and wrong, permissible and impermissible, appropriate and inappropriate, and the like. Therefore, contrary to your claim, MJA do *not* give an incomplete picture of morality."

The problems with Jones's objection are both methodological and substantive. Nobody can say what morality really is or what the word "morality" really means—neither he, nor I, nor the world's smartest philosopher or psychologist. Meaning can't be established by decree (except for stipulation in formal languages and for someone like Humpty Dumpty). Thus, it's pointless to ask, "What does 'morality' really mean?" If two scientists of morality were to disagree about the answer to this question, it would be impossible to settle the disagreement. This is why there has never been a consensus about the meaning of "morality" among morality scholars, not because they are a particularly contentious bunch.

Instead, "What does 'morality' mean?" is a lexicographic question comparable to the question "What does the French word '*mot*' mean?" These are empirical questions, and the adverb "really" has no place in them. Given a linguistic community, the question is what most competent speakers would take to be an acceptable usage of a word, or what usages wouldn't bring out puzzled looks on their faces. There's nothing you can do from your armchair. Hence, Jones's response is flawed methodologically. Specifically, it's confused about what definitions can and can't do for you (see also Decety and Batson 2009, 122; de Waal 2006, 161-163; Moll et al. 2008, 32; Verplaetse, Braeckman, and De Schrijver 2009, 31).

Yet, Jones's response is flawed substantively or semantically as well. For, under any reasonable definition of the English word "morality," I believe I did discuss moral things in the preceding sections of this article. Wouldn't it be unreasonable to say that moral goods and virtues and thick concepts aren't *bona fide* members of the class? What good reasons are there for granting semantic priority to judgments about rightness and permissibility?

> *(3) Pelusa's response*: "You argue that morality is made up of many different kinds of things. Then, a compelling science of morality should consider all of them as objects of inquiry, and take them all into account when making claims about what morality is or how morality works. Because they are different *kinds* of things, they call for different questions and methods. Furthermore, they may yield theoretical claims that aren't subsumable under a single, comprehensive theory of morality or parsimonious principle about the nature of morality. At least, you shouldn't start with the assumptions that (a) there is one such theory or principle and (b) there is a basic micro-unit, common to all moral things."

I think Pelusa's pluralist response is on the right track. Whatever the theoretical meaning and value of MJA findings turn out to be, they are about and shed light on one particular kind of moral thing. To make claims about morality in general, many other objects must be included. And many other methods must be used: psychological and neuroscientific, as well as anthropological, historical, and sociological. For example, for certain research questions, there's no way around the ethnographic observation of action and interaction in their natural setting. For certain research questions, there's no way around statistically representative surveys of a population. If you intend

to use scientific knowledge about morality to make practical recommendations to policy makers, then an organizational analysis is unavoidable—individual-level differences may be inconsequential or even irrelevant (e.g., Healy 2006; Heimer and Staffen 1998). In some social situations, it's not individuals' automatic intuitions or reactions to stimuli but deliberation and debate that carry the day regarding what ends up being done, and even what ends up being believed and felt by those very individuals (cf. Bloom 2010)—so stimuli that trigger quick reactions wouldn't be a suitable method. Similarly, if you're interested in moral narratives, you'll have to patiently listen to them or read them, give people some time and freedom to express themselves, and figure out their meanings (e.g., Bellah et al. 1985; Glaeser 2011; Lamont 1992, 2000; McAdams et al. 2008; Porpora 2001; Smith 1998; Wuthnow 1994, 1996). If you're interested in moral differences across societies, one key question is why societies differ in their repertoires of moral concepts—that is, the set of concepts that is available for people to use (e.g., Hacking 1988, 1995, 2002; Koselleck 2002; Somers 1995).

Pluralism suggests that several other factors should vary as well. For instance, the "moral area" under consideration (e.g., whether judgments have to do with harm, dishonesty, or disgust—Parkinson et al. 2011). Or the nature of the "situation." As Monin, Pizarro, and Beer (2007) observe, studies about "self-regulation failures in the moral domain" and "moral self-image" don't lead to the same theory of morality that the currently prevailing approaches lead to. The prevailing theories are to some extent an artifact of the prevailing approaches' methodological choices—their "prototypical situations." Pluralism has yet another implication. In sociology, history, and anthropology, the emphasis is normally placed on differences and purported incommensurabilities across individuals, groups, and cultures. In psychology, neuroscience, and economics, the emphasis is normally placed on similarities and purported universals. Both these emphases are legitimate; however, both can turn into blinders and thus result in omissions at best and errors at worst (on psychology, see Bartels 2008, 408). The pluralist view is that neither similarities nor differences should be given the ruling hand as a theoretical desideratum. Where to place the emphasis should be a function of the specific research question, goals, and object of inquiry, in the usual pragmatist fashion.

Lastly, Pelusa's pluralism recognizes that not all moral objects of inquiry are equally sensitive to or dependent on social, cultural, linguistic, and conceptual factors. In this sense, one can think of a continuum. At one end, there are things that can be reasonably called "moral," yet are (roughly speaking) reactions to stimuli, existing in many or most societies, not essentially

dependent on culture and concepts, amenable to a plausible evolutionary story, and so on (but see Barrett, Lindquist, and Gendron 2007; Lindquist and Barrett 2008). If you don't want to refer to them as "moral," call it a "platform" for morality or what morality is "rooted in" (Churchland 2011; cf. Darwin 1871; Kitcher 2006). At the other end, there are things that can also be reasonably called "moral," yet are (roughly speaking) inextricably intertwined with local concepts, practices, and institutions. What this distribution looks like is itself an important empirical question.

In sum, I believe that there is neither a single best method to study morality, nor a single object of inquiry on the basis of which to make claims about morality. Nor is there a single path toward an understanding or theory of morality. Instead, my view is that morality encompasses "countless kinds of things" (Dupré 1993, 1). Therefore, a plurality of theoretical and methodological approaches should coexist, each aware of its strengths but also of its partial perspective and limited scope. In practice, there should be more variation in objects of inquiry and methods. Individual judgment about rightness and wrongness is one among many objects of inquiry that scientists of morality need to do research on; so are moral questions, questions about good rather than right, questions about being rather than doing, as well as thick judgments, narratives, institutions, and behavior in natural settings. Neuroimaging and experimental methods are two among many methods that scientists of morality need to use; so are surveys, ethnographic observation and the history of moral concepts and practices.

In these respects, moral psychologists and neuroscientists can benefit from more engagement with historians, anthropologists, and sociologists of morality (e.g., Hitlin and Vaisey 2010; cf. Choudhury, Nagel, and Slaby 2009, 66-69; Haidt and Graham 2009; Slaby and Choudhury 2011). Certainly, in one sense it's entirely sensible that there be a division of labor among, say, neuroscience, sociology, and history. However, this division of labor entails two perils. First, it's a consistent historical pattern that scientific disciplines tend to forget the incompleteness of their standpoint and disregard findings that don't fit with their approach. Second and more important, some of the phenomena and processes of interest to a science of morality can't be broken into separate parts—for example, the social and the neural—because these parts mutually influence or even constitute one another. Hence, studying them separately may lead to misleading results (cf. Freese 2008). Unfortunately, a pluralist science of morality entails costs, too. First, its accounts and theories are unlikely to be simple and parsimonious, much like other versions of methodological, explanatory, and ontological pluralism in science. Second, as in politics, this sort of pluralism is time-consuming and

hard to realize. For it requires interactions among people who differ not just in the content of their answers, but in the form of the questions they ask and in the questions they find worth asking to begin with. Yet, just as in politics, this might still be the best way to prevent oversights and build a robust scientific understanding of morality, not just of a particular kind of individual moral judgment.

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Bio

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