

## Morality Goes Beyond Mind Perception

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Gray and colleagues make two central claims in their target article. The first is that people fundamentally understand morality in terms of a *moral dyad* consisting of an intentionally harming agent and a suffering patient; the second is that morality necessarily involves the process of *perceiving minds*. Both claims underlie the broader thesis that mind perception is the essence of morality, but the claims are largely orthogonal, so we discuss them separately.

Before we proceed, we must clarify what *morality* means. The authors subsume multiple distinct phenomena under this term, including moral *judgments*, moral *norms*, moral *domains*, and moral *actions*. They propose that each of these phenomena must be understood in terms of mind perception and dyadic representation. To defend each of these claims would require separate arguments and separate evidence, which the authors don't provide. Some of the claims are also unlikely to be true; for example, many moral *norms* refer neither to mind perception nor to the suffering of others (e.g., not to destroy the environment). Our commentary therefore focuses on the claim that appears to have the best prospect of being true and for which the authors mount the most arguments and evidence: that dyadic representation and mind perception fundamentally characterize moral *judgments*.

### The Moral Dyad Claim

The representation of a *moral dyad* comprises two elements: an *intentional agent* who commits a moral transgression and a *suffering patient* who is the recipient of the transgression. Specifically, “immoral acts are norm violations that match a dyadic template: *Acts are wrong when they involve the intentional causation of suffering* [emphasis added]” (p. 116). A weak version of this hypothesis would imply that the joint presence of intention and suffering constitutes one way (among others) in which an act can be immoral; this weak version is a widely accepted and uncontroversial hypothesis. But the authors appear to endorse a much stronger version of the hypothesis: that intention and suffering are *jointly necessary* for perceptions of immorality:

“the essence of moral judgment is the perception of two complementary minds—a dyad of an intentional moral agent and a suffering moral patient.” (p. 101)

“people understand morality as a combination of agent and patient, intention and suffering.” (p. 111)

“all moral transgressions are fundamentally understood as agency plus experienced suffering.” (p. 101)

We distill these formulations into the following thesis about human moral perception:

**Immorality = NECESSARILY (Intent to harm by agent + Suffering by patient)**

We label this the Intention+Harm+Suffering (IHS) thesis, and we consider the critical elements of the thesis in the form of four questions.

### Question 1: Is Intent Necessary for Moral Judgment?

Not according to the vast literature of moral psychology. Even though negative intentional actions elicit the most severe blame (Cushman, 2008; Ohtsubo, 2007), people are blamed for a host of unintended negative outcomes and behaviors (Hamilton, Blumenfeld, Akoh, & Miura, 1990; Shaw & Sulzer, 1964; Shultz, Jaggi, & Schleifer, 1987; Weiner, 1995). Unintentional outcomes are particularly blameworthy when the agent should have and could have prevented the negative outcome (Guglielmo & Malle, 2010; Lagnado & Channon, 2008; Weiner, 1995). So an agent's intention to harm is surely not necessary for moral judgments. Nor is it sufficient. Even when an agent intentionally performs a harmful action, people may withhold blame. A woman who, fearing for her life, intentionally shoots and kills an intruder is typically held morally and legally blameless, because she had a justified reason for acting (i.e., self-defense). Thus, intention to harm is neither necessary nor sufficient for moral judgment, in contradiction to the IHS thesis.

We may soften the assumed involvement of intentionality such that it refers to the perceiver's presupposition of morally judging only those agents have the *general capacity* to carry out intentional actions. Then the IHS thesis remains intact, but it offers a rather obvious claim: that moral judgment applies to agents (who can, in general, act intentionally) rather than nonagents (who cannot).

### Question 2: Is Harm Necessary for Moral Judgment?

We believe not. Cases of attempted harm admittedly involve *intentions* to harm, but the actual harm never occurs. In terms of what happens in the world, these cases lack harm, yet people view them as immoral (Robinson & Darley, 1995; Young & Saxe, 2009). Also problematic for the IHS thesis are people's negative moral judgments about expressly harm-free, taboo behaviors (Haidt, 2001). The authors try to accommodate such findings by arguing that people persist in viewing taboo behaviors as harmful (Gutierrez & Giner-Sorolla, 2007), which underscores the importance of harm for moral judgment. But this begs the question. For if harm is a necessary, and indeed formative, condition for moral judgment—as the IHS thesis suggests—then by virtue of what do people judge “objectively” harmless immoral cases to be harmful? What makes people “see” harm? It can't be because they judge the cases as immoral (because this perception is supposed to be shaped by harm). And it can't be because of “automatic” moral emotions such as anger, because even though anger seems to predict the (very small) harm perceptions in harmless cases (Gutierrez & Giner-Sorolla, 2007), anger surely isn't sufficient for harm perceptions (or judgments of morality, for that matter). There is something that signals “immorality!” that goes beyond harm.

The answer, we suggest, is a broad one. Immorality always involves a *norm violation*, and norms exist to protect the community from harm in the long run. But from that it does not follow that every norm must directly prohibit harm. Some norms will be prescriptive, encouraging positive behavior (Janoff-Bulman, Sheikh, & Hepp, 2009), and some proscriptive norms will be designed to prevent negative consequences that do not literally entail harm (e.g., the absence of benefits, loss of resources, to uncertainty, fear, etc.). If we call all negative consequences *harm*, we haven't gained anything. *Harm*, according to the Oxford English Dictionary (OED), means *injure*, *hurt*. This is the interpersonal meaning of harm that makes the IHS thesis interesting.

We have examined one side of the moral dyad—the intentionally harming agent—and now turn to the other side—the suffering patient.

### Question 3: Is a Suffering Patient Necessary for Moral Judgment?

Not without semantic weakening. We assume that, among the 18 meanings of *suffering* in the OED, the authors refer to the interpersonal meanings of *undergo pain*, *hardship*, *injury*. Several pieces of evidence undermine the claim that pain and injury are necessary conditions for moral judgments. First, moral norms

prohibit destruction of historic monuments, revered art, and natural environments. It is difficult to see a specific suffering patient in such cases. To be sure, the destruction of monuments and environments has negative consequences for the community. Humans care about many other things besides their own well-being; from this caring ensue feelings of sadness and anger when those valued things are destroyed. But we see no compelling reason to equate these emotions with pain and injury, with genuine suffering. Second, many people consider various “victimless” transgressions to be immoral, such as drug use, tax evasion, or paying for sex. These transgressions, for which it is even more difficult to see any interpersonal pain and injury, are in fact more frequent than the classic harm crimes (Braman, Kahan, & Hoffman, 2010). It appears that unless we count all of these norm violations as *interpersonal suffering*, the IHS thesis about immorality involving a suffering patient is false.

### Question 4: Does “Dyadic Completion” Support the IHS Thesis?

Dyadic completion holds that “when we see someone blameworthy—an apparent moral agent—we should complete the dyad by inferring the presence of another mind to suffer—a moral patient” (p. 111). But once more the authors appear to be begging the question. This is because, according to the IHS thesis, blameworthiness (a judgment of immorality) is contingent on a suffering patient; so the perceiver could not judge an agent as blameworthy without first determining that suffering has occurred. Unproblematic would be the proposal that people assign blame upon detecting a norm violation (which does not necessarily involve a suffering patient) and upon considering various other factors (e.g., intentionality, justification), which may associatively lead the perceiver to consider the possibility of someone suffering. But a network of *associations* linking moral judgment to suffering does not imply that moral judgment is *essentially* constituted by the conceptual pair of IHS—of an intentional harming agent and a suffering patient.

### The Mind Perception Claim

Gray and colleagues (this issue) assert that “mind perception is the *essence* of morality” (p. 118). Before we assess the evidence for this claim, we should briefly highlight two concerns at the outset. Arguably, mind perception is also the essence of social cognition. Assuming that morality and social cognition are not identical, the authors would do well to clarify what other essences distinguish them. But the talk of essences in a scientific theory does not seem particularly fruitful. We therefore take the authors' thesis to be that the

perception of minds is a *necessary feature* (among others) of moral judgment.

The authors explicate mind perception as involving the ascription of two general capacities: *agency* (the capacity to act intentionally) and *experience* (the capacity to feel pain and pleasure). It is important to note that agency confers moral responsibility for actions, whereas experience grants moral rights. According to the authors, these two dimensions are orthogonal, such that any combination of the two capacities is possible;<sup>1</sup> but having at least one of these capacities qualifies an entity as falling under the purview of morality.

The authors are careful to highlight the distinction between general mind perception (ascribing capacities of agency and experience) and the more specific process of mental state inference. On Gray et al.'s account, the general tendency to perceive minds is "more fundamental" for moral judgments than are specific mental state inferences. We hope to show in our brief discussion that the postulated fundamental role of mind perception is correct but also wholly insufficient for a theory of moral judgment. Moreover, at this point the agency–experience distinction is intriguing, but the evidence for its moral implications thin, at best.

To launch the discussion, we derive three predictions from the authors' postulate that mind perception fundamentally underlies morality.<sup>2</sup> First, agents perceived to have less (or no) *experiential mind* should be treated more harshly, with less care, because they are denied moral rights. Second, agents perceived to have less (or no) *agentic mind* should receive less (or no) blame for their actions because they lose their moral responsibility (they are no longer subject to moral obligations). Third, without further specification, the mind perception postulate implies that *fully minded* agents (being ascribed both agency and experience) should always receive blame for bringing about harmful outcomes and, for the same outcome, all fully minded agents should receive equal blame. We discuss each of these three predictions in turn.

### **Prediction 1: Ascribing Less Experiential Mind Leads to Harsh Treatment**

The authors propose to test the predicted link between perception of experience and moral treatment by examining two populations that suffer from mind perception deficits: psychopaths and patients with damage

<sup>1</sup>However, in a puzzling reversal, the authors later suggest that these capacities constitute opposing poles of a single dimension. "People view others as . . . *either agents or patients* [emphasis added], capable of either intention and blame, or experience and pain. This either/or perception stems from the structure of the moral dyad" (p. 114).

<sup>2</sup>These predictions are explicit versions of what we believe the authors claim in the article.

to their ventromedial prefrontal cortex (VMPFC). Gray et al. argue that one reason people with psychopathy are more willing to harm others is because they ascribe less experience to the minds of other creatures. But the evidence for this claim is weak. Gray, Jenkins, Heberlein, and Wegner (2011) correlated online survey participants' psychopathy scores with their ascriptions of experience to adults, children, and animals. The correlation was very small ( $r = -.12$ ) and indistinguishable from the corresponding correlation between psychopathy and ascriptions of *agency* to adult humans ( $r = -.09$ ). This pattern undermines the purported unique relationship between experience ascriptions and willingness to harm, as well as the corresponding mediating role of the denial of moral rights (which was not measured).

Gray et al. also discuss studies of patients with lesions to the VMPFC as evidence for the link between experience perception and morality (Ciaramelli, Muccioli, Làdavas, & di Pellegrino, 2007; Koenigs et al., 2007). The consistent finding from these studies is that VMPFC patients are more willing than control participants to sacrifice an innocent victim in order to save the lives of several other people (in the notorious trolley scenario). But there are no data indicating that such patients fail to ascribe experience to the victim. They may not feel caring emotions toward the victim (Moretto, Làdavas, Mattioli, & di Pellegrino, 2010), or they may simply not think about the victim. In fact, we might say that what is reduced is the patients' *own experience* (their attention, empathy, and compassion), not their *ascription of experience* to others.

But the authors offer further evidence for the prediction that experiential mind ascriptions inform moral judgments. They appeal to findings showing that moral perpetrators often dehumanize their victims. It is crucial to note that support for Gray et al.'s view requires a specific pattern of dehumanization, namely, that people affirm *agency* (i.e., that the target can act intentionally) but deny *experience* (i.e., that the target can feel pain). Such a pattern of dehumanization would maintain the target's moral responsibility but deny her moral rights (hence, harming her would not constitute a moral transgression). Anecdotally there seems to be some evidence for at least the denial of an experiential mind, as in the study of torturers. During the witch hunts of the 15th century, people believed that the devil protected witches from pain, which served to justify horrific tortures of presumed witches: "She will be so insensible to the pains of torture that she will sooner be torn limb from limb than confess any of the truth" (Kramer & Sprenger, 1487, p. 475). But research on dehumanization often finds a different pattern: Dehumanized targets are denied *agency* but are still granted phenomenological, animalistic mental states (e.g., Cikara, Eberhardt, & Fiske, 2011; Haslam, 2006).

### Prediction 2: Ascribing Less Agency Leads to Milder Moral Judgments

The evidence for this claim appears limited to the correlational study, just mentioned, by Gray et al. (2011), which shows that higher scores on the Autism Quotient (AQ) among a nonpatient population predict lower agency ascriptions to an adult human target (but not to other human targets). However, this correlation is again very small ( $r = -.14$ ), so asserting that it reflects an “inability to attribute agency” (p. 104) rather overstates the matter. Moreover, the mind perception account predicts that reduced agency attributions among high-AQ participants (and, presumably, among individuals with autism) would lead to more forgiving moral judgments. After all, an offending agent with less “agency” also has less moral responsibility, so the agent’s behavior should be punished more leniently. Yet the evidence shows the opposite pattern. Moran et al. (2011) found that people with Asperger’s Syndrome, compared with neurotypical participants, judged unintentional negative behavior as *less* permissible.

### Prediction 3: Fully Minded Agents Should Receive Full and Equal Blame

Adult humans are typically assumed to be fully “minded”—to have complete agentic and experiential capacities (Gray, Gray, & Wegner, 2007). If moral judgment were a direct function of this general level of mind perception, then a given negative action would result in equivalent blame, regardless of how the action occurred or who performed it (so long, of course, that the agent is a typical, “minded” person). This cannot be true. There is a wealth of evidence showing that people grade their blame judgments according to a number of factors that go beyond general mindedness: They care about whether the agent intended to bring about the negative outcome (Dahourou & Mullet, 1999; Ohtsubo, 2007), whether an unintended outcome was foreseeable or unforeseeable (Lagnado & Channon, 2008; Nelson-Le Gall, 1985), whether an intentional action was impulsive or deliberative (Pizarro, Uhlmann, & Salovey, 2003), and whether a deliberative action was performed for justifiable reasons (Howe, 1991; Reeder, Kumar, Hesson-McInnis, & Trafimow, 2002). In other words, people care not only about whether an agent is “minded” but also, far more important, what the specific contents of that agent’s mental states were.

Thus, although we agree that mind perception plays an important role in moral judgment—by designating for moral consideration only those entities with minds—this process of granting mindedness is a background activity that is, by itself, wholly insufficient for moral judgments. Upon seeing a negative event (e.g.,

a broken car window), people may wonder whether it was caused by an agent (e.g., an angry girlfriend) or a nonagent (e.g., a falling rock or hailstone), and if it was agent caused, people will assume that the agent has a mind. But this does not get the machinery of moral judgment very far. We end this commentary with a sketch of what else is needed, what else fuels the machinery. We rely here on a model of blame we have developed recently (Guglielmo, Monroe, & Malle, 2009; Malle, Guglielmo, & Monroe, 2012), depicted in Figure 1.

### After and Beyond Mind Perception

En route to a moral judgment perceivers must first detect a negative event—an event that violates a norm. Having and applying a norm system to events in the world is a fundamental prerequisite for being a moral perceiver. Norm-violating events include damage (e.g., a scratched car door); harm (an insult); or simply outcomes that are seen as bad, uncomfortable, or disgusting (Felstiner, Abel, & Sarat, 1980). Once detected, norm violations trigger rapid evaluative responses (Luo et al., 2006; Van Berkum, Holleman, Nieuwland, Otten, & Murre, 2009). But a rapid evaluation that “something bad happened” is not yet a judgment of blame (Pomerantz, 1978). Social perceivers blame people, not physics. So for negative events to lead to blame, perceivers must establish that an *agent caused* the outcome (Shaver, 1985; Sloman, Fernbach, & Ewing, 2009). This is where we are in agreement with Gray and colleagues: Moral judgment (in contrast to, say, sadness over a natural disaster) is directed at entities that are perceived as agents—as having the capacity to act intentionally.

But agents can cause norm-violating events in two very different ways: intentionally or unintentionally. In our model, determining intentionality constitutes a pivotal point in the process of moral judgment. It isn’t just that intentionality amplifies blame, as numerous studies and models suggest (Cushman, 2008; Lagnado & Channon, 2008; Ohtsubo, 2007; Shaver, 1985). More than this, an intentionality judgment actually triggers one of two different processing paths, each of which utilizes different information. If the norm violation is an agent’s intentional action, people consider the agent’s *reasons* for acting (primarily beliefs and desires; Malle, 1999), and blame may be mitigated depending on the justificatory power of these reasons. If the norm violation is an unintentional behavior or outcome, two very different considerations become relevant: People are concerned with what the agent *should* have done (obligation) and *could* have done (capacity) to prevent the event. If both of these conditions hold, agents are blamed even for unintentional norm violations.

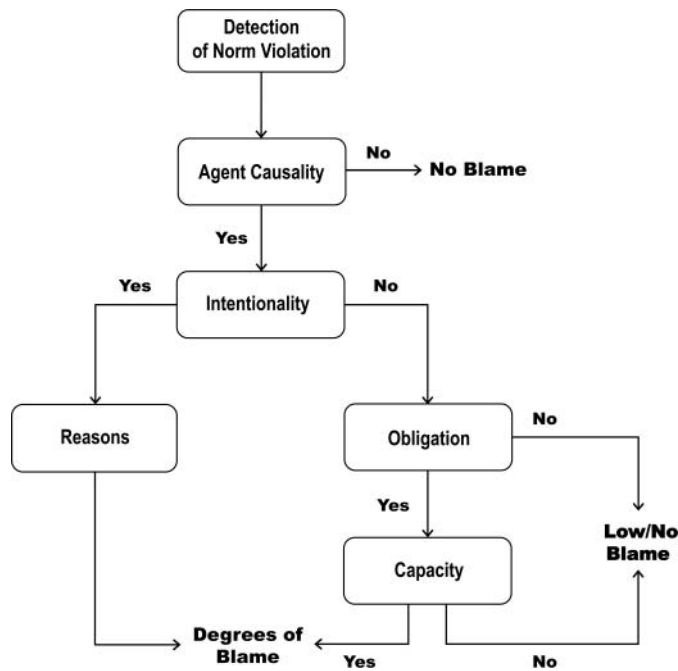


Figure 1. Concepts and processing paths in the path model of blame.

There is ample evidence for each of these elements of the model (reviewed in Malle et al., 2012), and a few studies simultaneously tested larger portions of the model (e.g., Quigley & Tedeschi, 1996). We are now beginning to test the entire model—the process from event detection to full-fledged blame judgments. With its detailed specifications we can derive predictions from the model about the priority, information dependency, and timing of each step, and by varying stimulus information and a priori beliefs we can manipulate which nodes in the network are preactivated, thereby speeding up and constraining the judgment process.

### Conclusion

We have distilled the authors' proposal about mind perception and morality into two claims. The first was that moral judgment necessarily involves a dyad of an agent's intentional harming and a patient's suffering. We argued that intentionality, harm, and suffering are not necessary (either jointly or individually) for moral judgment. The second claim was that general mind perception is fundamental for moral judgment and is responsible for "switching on the 'moral faculty'" (p. 115). We agree that mind perception is necessary, but it is only one among several other, more distinctive processes. The moral machinery is switched on by recognizing a norm-violating event, which triggers the search for an agent who caused the event. General mind perception is one of the relevant processes

here, but moral judgment necessarily involves specific inferences about intentionality and either reasons or obligation and capacity.

Mind and morality are closely tied together. But a theory of moral judgment must go beyond broad brushstrokes of "moral dyad" and "mind perception." Picasso's art, though abstract at one level, was also masterful in its detail and precision.

### Note

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