

# Lecture 09 : Moral Psychology

Stephen A. Butterfill  
< s.butterfill@warwick.ac.uk >

Thursday, 14th March 2024

## Contents

<b>1</b>	<b>Introduction to Lecture 09</b>	<b>3</b>
<b>2</b>	<b>Time to Abandon Ethics?</b>	<b>3</b>
<b>3</b>	<b>Conflicting Evidence against a Dual-Process Theory of Moral Judgement</b>	<b>5</b>
3.1	Time Pressure . . . . .	5
3.2	Process Dissociation . . . . .	6
3.3	Conflicts in the Conflicting Evidence . . . . .	7
3.4	Conclusion . . . . .	7
3.5	Appendix: Some Other Evidence . . . . .	7
<b>4</b>	<b>Moral Reframing and Process Dissociation</b>	<b>8</b>
<b>5</b>	<b>Does emotion influence moral judgment or merely motivate morally relevant action? (Reprise)</b>	<b>10</b>
5.1	A Parallel with Physical Cognition . . . . .	10
5.2	Two Ideas about the Role of Emotion . . . . .	11
5.3	Two Puzzles . . . . .	12
<b>6</b>	<b>Moral Foundations Theory Reprise</b>	<b>12</b>
6.1	Objections to Moral Foundations Theory . . . . .	12
6.2	A Hybrid Theory? . . . . .	13
<b>7</b>	<b>Outro: Ethical Unknowns</b>	<b>13</b>
<b>8</b>	<b>Index of Puzzles</b>	<b>14</b>
8.1	Emotion . . . . .	14
8.2	Mikhail's Puzzle . . . . .	14
8.3	Reason . . . . .	14

8.4	Framing Effects . . . . .	15
8.5	Moral Reframing . . . . .	15
<b>9</b>	<b>Appendix: Origins of Moral Psychology</b>	<b>15</b>
9.1	Poverty of Stimulus Arguments . . . . .	16
	<b>Glossary</b>	<b>16</b>

## 1. Introduction to Lecture 09

This lecture aims to bring together the different theories and discoveries we have considered over the course, returning at last to the question we started with: Why study moral psychology?

This lecture aims to bring together the different theories and discoveries we have considered over the course. It covers several issues, each of which can be considered in isolation:

1. What ethical abilities do preverbal infants manifest? And are there innate drivers of morality? (*Appendix: Origins of Moral Psychology* (section §9))
2. Is there any evidence *against* the stripped-down dual-process theory of ethics? (*Conflicting Evidence against a Dual-Process Theory of Moral Judgement* (section §3))
3. *Does emotion influence moral judgment or merely motivate morally relevant action?* (*Reprise*) (section §5) (This part also introduces and objection to the Affect Heuristic.)
4. If the stripped-down dual-process theory of ethics is correct, what are the consequences for Moral Foundations Theory? (*Moral Foundations Theory Reprise* (section §6))
5. The stripped-down dual-process theory enables us to explain why moral reframing works (*Moral Reframing and Process Dissociation* (section §4)).
6. How can we do ethics without not-justified-inferentially premises? *Time to Abandon Ethics?* (section §2)

## 2. Time to Abandon Ethics?

How should we do ethics if we cannot rely on not-justified-inferentially premises? Greene (2014) and Singer (2005) propose some kind of consequentialism. But there is insufficient reason to accept that problems of cooperative living are best solved by computing a single attribute. And cutting up healthy people to distribute their organs will not end well.

A better approach may be to accept that we do not know anything much about ethics and adopt the attitude of a successful gambler. In making moral decisions, having a consistent set of principles is not the goal. Identifying and exploiting favourable risk-reward ratios is.

How should we do ethics if we cannot rely on not-justified-inferentially premises?

Greene (2014) and Singer (2005) propose some kind of consequentialism. Such theories have many implications covering every decision you and I make, large or small. But the arguments for them are not compelling. Given what we learned about moral pluralism (see *Moral Pluralism: Beyond Harm* in Lecture 04), they views appear revisionary insofar as they are committed to moral monism. Although this is not necessarily a problem, some explanation for the revision is needed. A further difficulty is that philosophers have defended a wide range of incompatible theories. As an outsider, it is not possible to know which, if any, of these theories is the true one.

Meanwhile we face practical problems with ethical aspects. Choosing careers, giving money and time, staying here or moving there. Some people even experience buying a coffee, shopping for food and disposing of their waste as actions with an ethical dimension. Here I think it is helpful to know that we do not know what is right. The complexity of even the most mundane decisions contrasts with the slender justification we might have for any general ethical principle or theory. This is just the kind of situation that calls for gambling.

We can make bets. To illustrate, consider Pogge's question:

Do 'the global poor have a much stronger moral claim to that 1 percent of the global product they need to meet their basic needs than we affluent have to take 81 rather than 80 percent for ourselves'? (Pogge 2005, p. 2)

Confidently making a bet on the answer to this question does not require knowing ethical truths. Nor does it entail commitment to any ethical principles. Gambling is about identifying and exploiting favourable risk-reward ratios, not about having a consistent set of principles.

Pogge's approach also illustrates one way in which philosophy is useful independently of yielding knowledge of ethical truths. Much of Pogge's argument is an attempt to show that opposing ethical theories generate the same answer to the above question. And, in particular, that libertarianism, which is usually thought of as strong on property rights and so opposed to redistribution, does nevertheless support a positive answer to his question about the global poor. As ethical gamblers, the existence of multiple routes to the same answer, especially multiple routes with inconsistent starting points, is exactly the kind of thing that can increase our confidence in a bet.

### 3. Conflicting Evidence against a Dual-Process Theory of Moral Judgement

Several studies provide results which partially undermine the evidence in favour of our stripped-down dual-process theory of moral cognition. Here we consider two of the most compelling (Bago & De Neys 2019; Gawronski et al. 2017). Taken together these studies are puzzling: as well as individually conflicting with the evidence for our dual-process theory, the two studies also appear to conflict with each other. It is hard to identify a view that is consistent with taking the results from all of the studies at face value.

We have a stripped down dual-process theory of moral judgement (see *A Dual Process Theory of Ethical Judgement* in Lecture 07) and an auxiliary hypothesis (see *Appendix: Dual Process Theory and Auxiliary Hypotheses* in Lecture 08). According to these:

Two (or more) ethical processes are distinct in this sense: the conditions which influence whether they occur, and which outputs they generate, do not completely overlap.

One process is faster than another: it makes fewer demands on scarce cognitive resources such as attention, inhibitory control and working memory.

Only the slow process ever flexibly and rapidly takes into account differences in the more distal outcomes of an action.

Earlier we saw that there is some evidence which appears to support the predictions of this theory (in *Evidence for Dual Process Theories* in Lecture 08). Is there also evidence disconfirming any of its predictions?

While it is hard to find evidence directly against this theory,<sup>1</sup> there are some studies that undermine the view we took earlier on which studies provide evidence in favour of the dual-process theory.

#### 3.1. Time Pressure

Recall that Suter & Hertwig (2011) provide evidence that time pressure makes participants less sensitive to distal outcomes. Bago & De Neys (2019) consider what happens when subjects first make a moral judgement under time pressure and extraneous cognitive load and then, just after, make another

---

<sup>1</sup> One potential source of evidence that directly opposes the theory is Bialek & De Neys (2017) (mentioned below). Unfortunately I came across this too late to include it in the recording.

moral judgement (in answer to the same question) with no time pressure and no extraneous cognitive load. They report:

‘Our critical finding is that although there were some instances in which deliberate correction occurred, these were the exception rather than the rule. Across the studies, results consistently showed that in the vast majority of cases in which people opt for a [consequentialist] response after deliberation, the [consequentialist] response is already given in the initial phase’ (Bago & De Neys 2019, p. 1794).

As explained in the recording, this is an obstacle to considering Suter & Herwig (2011)’s study as evidence for our dual-process theory of moral judgement.

### 3.2. Process Dissociation

Recall that Conway & Gawronski (2013) use process dissociation to provide evidence for the prediction that higher cognitive load reduces sensitivity to more distal outcomes.

Gawronski et al. (2017) note that reduced sensitivity to more distal outcomes could be consequence of a general preference not to do anything when under time pressure. They therefore extend the process dissociation model to include a preference for no action.

Separating sensitivity to distal outcomes from preferences not to act changes the picture:

‘The only significant effect in these studies was a significant increase in participants’ general preference for inaction as a result of cognitive load. Cognitive load did not affect participants’ sensitivity to morally relevant consequences’ (Gawronski et al. 2017, p. 363).

They conclude:

‘cognitive load influences moral dilemma judgments by enhancing the omission bias, not by reducing sensitivity to consequences in a utilitarian sense’ (Gawronski et al. 2017, p. 363).

While we should be cautious about putting too much weight on this study, these results do reveal that we cannot take Conway & Gawronski (2013) as evidence in favour of our dual-process theory and auxiliary hypothesis.

### 3.3. Conflicts in the Conflicting Evidence

The two studies which conflict with the evidence for our dual-process theory also appear to conflict with each other. If Gawronski et al. (2017) is right about cognitive load, the participants in Bago & De Neys (2019)'s study should have appeared to be less 'utilitarian' (as they describe it) when under cognitive load. This is because avoiding action would lead one to make judgements that Bago & De Neys classify as non-utilitarian.

So we cannot accept both Gawronski et al. (2017)'s and Bago & De Neys (2019)'s conclusions.

This is a sign that there may be something wrong with the way the studies are constructed, perhaps because the dual-process theories they are targeting are not well specified (e.g. involve too many independent bets being made simultaneously).

### 3.4. Conclusion

We may not yet have found sufficient grounds to reject the stripped-down dual-process theory of moral cognition outright. But we should recognise that we do not have sufficient evidence to confidently assert that any of the candidate auxiliary hypotheses are true (see *Appendix: Dual Process Theory and Auxiliary Hypotheses* in Lecture 08). On balance, it seems reasonable to deviate from the mainstream in not accepting any auxiliary hypothesis as firmly established while provisionally accepting, in line with the mainstream, that the stripped-down dual-process theory (see *A Dual Process Theory of Ethical Judgement* in Lecture 07) will turn out to be true.

This matters for Greene (2014)'s attempt to link characteristically consequentialist judgements to slow processes. As things stand, we do not know that any such link exists. We should be correspondingly cautious in using the dual-process theory in defending a consequentialist ethical theory.

### 3.5. Appendix: Some Other Evidence

There is much evidence on how time pressure and cognitive load influence moral judgements. Understanding how it bears on the stripped-down dual process theory is complicated, in part because many studies target features of Greene's dual process theory that are not features of the stripped-down dual process theory. Here my focus is on studies that can be interpreted as finding evidence against the theory.

Bialek & De Neys (2017) provide direct evidence against our auxiliary hypothesis: time pressure and cognitive load do not appear to influence the extent

to which participants take into account the distal outcomes of an action in making moral judgements.

Tinghög et al. (2016) find no evidence for effects of time pressure or cognitive load on moral judgements. They conclude that ‘intuitive moral decision-making does not differ from decisions made in situations where deliberation before decision is facilitated.’

Baron & Gürçay (2017) offer a meta-analysis of response time findings, but focus on an auxiliary hypothesis which we have not used (the ‘default interventionist’ claim).

Koop (2013) and Gürçay & Baron (2017) both measure subjects’ movements as they make a decision, which can provide a window on to how the decision unfolds. Koop (2013) do not find evidence to support the conjecture that subjects increasingly consider distal outcomes later in the decision process. Gürçay & Baron (2017) do not find support for the conjecture that more thinking increases sensitivity to the distal outcomes of actions.

Capraro et al. (2019) examined the effects of telling (they say ‘priming’) people to use ‘emotion, rather than reason’. As background, they note that much of the research on dual-process theories concerns characteristically consequentialist judgements, which may confound two factors: reluctance to cause harm instrumentally and impartiality. The auxiliary hypothesis we have chosen is linked to the first factor (reluctance to cause harm instrumentally) but not the second. They find that when these factors are separated, priming intuition reduces willingness to cause harm instrumentally.<sup>2</sup>

Although Capraro et al. (2019)’s study supports the auxiliary hypothesis, I have included it here (in a section on evidence against our dual-process theory of moral judgement) because it illustrates a complication in interpreting studies which appear to provide evidence against the theory: none of them are focussed narrowly on sensitivity to distal outcomes specifically rather than on some broader contrast between characteristically consequentialist and characteristically deontological.

## 4. Moral Reframing and Process Dissociation

Given that the evidence for cultural variation in moral psychology is at best weak, and given that the theoretical argument for moral reframing is flawed

---

<sup>2</sup> Bartels (2008) distinguished between subjects with more intuitive and more deliberative thinking styles. He found that moral judgement ‘(a) makes use of intuitive and deliberative process, (b) is influenced by the judgment-eliciting context, and (c) recruits representations of both deontological constraints and utilitarian considerations.’



(see *The Argument and Some Objections* in Lecture 05), why does moral reframing seem to work? We have already seen that part of the answer may be that moral reframing provides cues to the source of a message (see *The Puzzle of Moral Foundations Theory* in Lecture 05). But perhaps this is not the whole story. Luke & Gawronski (2021) use process dissociation to show that more socially conservative people tend to be less concerned with the consequences of actions. Could this also contribute to explaining why moral reframing works?

Earlier (in *The Argument and Some Objections* in Lecture 05) we encountered a puzzle about moral reframing:

If the evidence for cultural variation in moral psychology is at best weak, and if the theoretical argument for moral reframing is flawed, why does moral reframing seem to work?

We have already seen some attempts to address it, most notably the suggestion that moral reframing works by providing cues to the source of the message (*The Puzzle of Moral Foundations Theory* in Lecture 05).

A further, compatible possibility is suggested by Luke & Gawronski (2021)'s discovery that socially conservative people are less influenced by overall consequences for the greater good than socially liberal people. They report:

‘on average, conservatives are less inclined to accept harmful actions for the greater good than liberals. [And] liberals are more sensitive to the consequences of a given action for the greater good than conservatives’ (Luke & Gawronski 2021, p. 10).

Could this alone explain the moral reframing effects? Does reframing to appeal to socially conservative people involve de-emphasizing individuals paying a cost for a greater collective benefit?

As a potential explanation of moral reframing, this research has the advantage that it does not rely on the Moral Foundations Theory, and so avoids some of the objections to that theory (see *The Argument and Some Objections* in Lecture 05).

We should be cautious. Luke & Gawronski (2021) identify limits of their research. And, in any case, generalising from the trolley problems they consider to environmental issues is risky.

## 5. Does emotion influence moral judgment or merely motivate morally relevant action? (Reprise)

The stripped-down dual-process theory of ethical judgement (introduced in *A Dual Process Theory of Ethical Judgement* in Lecture 07) is helpful for understanding how emotions does influence moral judgement. It provides reasons for rejecting claims about a direct connection between emotions and moral judgements. Yet it is also consistent with the view that emotions generated by fast processes provide the raw materials for ethical reasoning.

Earlier we saw, that although there is some evidence for the effect of emotion on judgement, this effect appears to be at best quite small (Landy & Goodwin 2015a; Landy & Goodwin 2015b; see **\*\* ERROR! MISSING xref FOR unit : emotion\_influence\_or\_motivate \*\***).

This would seem to rule out the hypothesis that moral judgements are explained by the Affect Heuristic (see *Moral Intuitions and Emotions: Evidence* in Lecture 01 and *Lecture 02*).

We can use the dual-process theory of moral judgement to explain why the affect heuristic is not likely to play much role in moral judgement. The dual-process theory also allows us to identify an alternative, more interesting conjecture about the role of emotion in moral judgement. (The dual-process theory was introduced in *A Dual Process Theory of Ethical Judgement* in Lecture 07.)

To see why, consider a parallel to the question about emotion influencing moral judgement from physical cognition.

### 5.1. A Parallel with Physical Cognition

Does perception influence judgements about object trajectories? There is a good case to be made for a positive answer here. We know that there is a link between two sets of principles. There are principles which characterise the operation of fast processes involved in tracking and predicting objects' movements and interactions. And there are the principles of impetus mechanics which characterise the patterns of judgements non-experts will make about objects' movements and interactions. The degree of overlap between the two sets of principles gives us a reason to suppose that there is a connection (see *Preview: Ethics vs Physics* in Lecture 06). The fast processes influence judgements about object trajectories. But how do they do so?

We know that their influence is discretionary: experts do not invariably make the same incorrect judgements that non-experts do. We also know that the influence need not be direct. Instead, the fast processes influence

the overall phenomenological character of perceptual experiences associated with objects moving and interacting.<sup>3</sup> These effects on experience may lead people, over time, to form views about how objects move. They may not be able to articulate these, or they may (like scientists in the Aristotelian tradition) write them down. These views may influence their judgements about particular cases.

This suggests that perception does influence judgements about object trajectories, but perhaps only in an indirect way. We might conjecture that fast processes influence the overall phenomenal characters of perceptual experiences of objects, which, over time, shape the judgements non-experts make about the ways objects move and interact. We would not expect, on this conjecture, that manipulating perceptual experiences *at the time a judgement is made* would make much, if any, difference to the judgement. The connection between perception and judgement is much more subtle.

But how is this relevant to moral judgement?

## 5.2. Two Ideas about the Role of Emotion

On the hypothesis that moral judgements are explained by the Affect Heuristic, we should expect feelings occurring *at the time you make a moral judgement* to influence that judgement.

On the stripped-down dual-process theory, we should not expect this. After all, moral judgements are likely to be dominated by slower processes (a dominance which can perhaps be reduced by introducing time pressure or cognitive load). We should therefore not expect that feelings *at the time you make a moral judgement* will necessarily influence that judgement. (Except perhaps as a fall back, where you have nothing else to base your judgement on.)

Instead, if we accept the stripped-down dual-process theory we might conjecture, further, that some feelings may reflect (or perhaps, in some cases, even constitute) the operations of fast processes. Given this conjecture, we should expect these feelings to lead people, over time, to form views about ethical attributes. As in the physical case, these views are likely to be formed, sometimes at least, through processes of reasoning. In support of such a view, the key discoveries are not that manipulating people's feelings influences their moral judgements but that moral violations have a characteristic effect on feelings (Chapman & Anderson 2013).

---

<sup>3</sup> Fast processes may also influence the overall phenomenological character of experiences associated with imagining objects moving and interacting. For there is some evidence of overlap in the processes of perceiving and imagining (Kosslyn 1978).

The stripped-down dual-process theory is therefore consistent with the view that feelings play a fundamental role in shaping ethical judgements and also with the view that such judgements are a consequence of reasoning.<sup>4</sup> Much as the perceptual experiences generated by fast processes provide the raw materials for physical reasoning in Aristotelian physics, so the emotions generated by fast processes may provide the raw materials for ethical reasoning.

### 5.3. Two Puzzles

The stripped-down dual-process theory of moral cognition provides candidate answers to two puzzles which we encountered earlier:

*Emotion* Why do feelings of disgust influence moral intuitions? And why do we feel disgust in response to moral transgressions? (see *Conclusion: Two Puzzles* in Lecture 02 and **\*\* ERROR! MISSING xref FOR unit : emotion\_influence\_or\_motivate \*\***)

*Reason* Why are moral judgements sometimes, but not always, a consequence of reasoning from known principles? (see *Why Is Moral Dumbfounding Significant?* in Lecture 03 for the ‘not always’ part and *Moral Disengagement: Significance* in Lecture 03 for the ‘sometimes’ part)

I introduce the candidate answers in the recording.

## 6. Moral Foundations Theory Reprise

How well supported are the claims of Moral Foundations Theory (see *Moral Foundations Theory: An Approach to Cultural Variation* in Lecture 04) by the discoveries we have encountered? And how does Moral Foundations Theory relate to our stripped-down dual-process theory (see *A Dual Process Theory of Ethical Judgement* in Lecture 07)?

### 6.1. Objections to Moral Foundations Theory

The main theoretical objection to Moral Foundations Theory arises from moral disengagement (Bandura 2002; see *Moral Disengagement: The Theory* in Lecture 03), which shows that moral judgements are sometimes (indirectly, perhaps) a consequence of reasoning. This is incompatible with the Social Intuitionist Model of Moral Judgement, which is one component of Moral Foundations Theory.

---

<sup>4</sup> This is roughly Nichols (2004)’s view of psychological relations between emotions and judgements. (We are not concerned here with questions about justification.)

This theoretical objection matters for interpreting the results of studies using the Moral Foundations Questionnaire. For the objection implies, contra Social Intuitionist Model of Moral Judgement, that moral judgements are not a function only of moral foundations and cultural learning.

The main empirical objection to Moral Foundations Theory arises from the multiple failures of the Moral Foundations Questionnaire to exhibit scalar invariance (see *Operationalising Moral Foundations Theory* in Lecture 04 and *The Argument and Some Objections* in Lecture 05).

## 6.2. A Hybrid Theory?

Moral Foundations Theory and our stripped-down dual-process theory are incompatible. Most clearly because Moral Foundations Theory includes a one-process theory of moral judgement.

Nevertheless, it may be possible to combine components of the two theories. This could be advantageous for both sides.

From the point of view of Moral Foundations Theory, mixing in a dual-process theory could suggest new ways to discover evidence for cultural variation that do not depend on the Moral Foundations Questionnaire (such as process dissociation; see *Moral Reframing and Process Dissociation* (section §4)).

From the point of view of our dual-process theory, taking moral pluralism serious may help in getting beyond relying too heavily on a crude and not-well-supported-by-evidence distinction between characteristically consequentialist and characteristically deontological judgements.

## 7. Outro: Ethical Unknowns

Why study moral psychology? At the start of the course I suggested three reasons and asked you for yours. Let's see how they have held up: the things we learnt, and the questions we are left with.

Why an outro, not a conclusion? Because reaching a conclusion is your job (in the longer essay), not mine.

But if there were a conclusion to the lectures, it would have to answer the question we started with: Why study moral psychology? Not because it gives us deep insight into ethical principles, nor because we can know much about the processes underpinning our ethical abilities. But because it makes us aware of how little we know, how deep cultural differences in ethics can run, and because it suggests ways to work around these.

## 8. Index of Puzzles

A list of the puzzles we have encountered, indexing where they were introduced and where they were addressed.

*There are no recordings or slides associated with this index.*

### 8.1. Emotion

Why do feelings of disgust influence moral intuitions? And why do we feel disgust in response to moral transgressions?

Introduced: *Conclusion: Two Puzzles* in Lecture 02 and **\*\* ERROR! MISSING xref FOR unit : emotion\_influence\_or\_motivate \*\***

Addressed: *Does emotion influence moral judgment or merely motivate morally relevant action? (Reprise)* (section §5) (in a sense nearly everything in the lectures is about this puzzle and the one about reason).

### 8.2. Mikhail's Puzzle

Why do patterns in moral intuitions reflect legal principles humans are typically unaware of?

Introduced: *A Linguistic Analogy* in Lecture 02

Indirectly addressed: *Framing Effects: Emotion and Order of Presentation* in Lecture 06 (The research on framing effects is a challenge for the premise on which the puzzle is based.)

### 8.3. Reason

Why are moral judgements sometimes, but not always, a consequence of reasoning from known principles?

Introduced: *Why Is Moral Dumbfounding Significant?* in Lecture 03 (for the 'not always' part) and *Moral Disengagement: Significance* in Lecture 03 (for the 'sometimes' part)

Indirectly Addressed: *A Dual Process Theory of Ethical Judgement* in Lecture 07 (in a sense nearly everything in the lectures is about this puzzle and the one about emotion).

Directly Addressed: *Does emotion influence moral judgment or merely motivate morally relevant action? (Reprise)* (section §5)

## 8.4. Framing Effects

Why are people's moral intuitions about Switch and Drop subject to order-of-presentation effects?

Introduced: *Conclusion: Yet Another Puzzle* in Lecture 03

In *Framing Effects: Emotion and Order of Presentation* in Lecture 06, we strengthened the evidence for the premise on which the puzzle is based.

Indirectly Addressed: *What Is the Role of Fast Processes In Not-Justified-Inferentially Judgements?* in Lecture 07 (The moral intuitions about these dilemmas are not-justified-inferentially judgements. The existence of framing effects may be a consequence of the indirect role fast processes play in not-justified-inferentially judgements.)

## 8.5. Moral Reframing

If the evidence for cultural variation in moral psychology is at best weak, and if the theoretical argument for moral reframing is flawed, why does moral reframing seem to work?

Introduced: *The Argument and Some Objections* in Lecture 05

Addressed: *The Puzzle of Moral Foundations Theory* in Lecture 05 and *Moral Reframing and Process Dissociation* (section §4)

## 9. Appendix: Origins of Moral Psychology

Developmental research indicates that developmental origins of moral psychology can be found even in preverbal infants.

*We did not cover this in the 2023–24 lectures, but I have included it as an appendix for the few people who may have special reasons be interested.*

*moral sense*: a 'tendency to see certain actions and individuals as right, good, and deserving of reward, and others as wrong, bad, and deserving of punishment' (Hamlin 2013, p. 186).

Hamlin's three requirements for having a moral sense:

- prosociality (helpfulness towards others)
- discrimination between pro- and anti-social acts
- retribution

'infants are making relatively complex and sophisticated social judgments in the first year of life. They not only evaluate others based on the local valence

of their behavior, they are also sensitive to the global context in which these behaviors occur. During the second year, young toddlers direct their own valenced acts toward appropriate targets.' (Hamlin et al. 2011, p. 19933)

'developmental research supports the claim that at least some aspects of human morality are innate. From extremely early in life, human infants show morally relevant motivations and evaluations—ones that are mentalistic, are nuanced, and do not appear to stem from socialization or morally specific experience' (Hamlin 2013, p. 191).

### 9.1. Poverty of Stimulus Arguments

How do poverty of stimulus arguments work? See Pullum & Scholz (2002).

1. Human infants acquire X.
2. To acquire X by data-driven learning you'd need this Crucial Evidence.
3. But infants lack this Crucial Evidence for X.
4. So human infants do not acquire X by data-driven learning.
5. But all acquisition is either data-driven or innately-primed learning.
6. So human infants acquire X by innately-primed learning .

'the APS [argument from the poverty of stimulus] still awaits even a single good supporting example' (Pullum & Scholz 2002, p. 47). Since then (2002), a single example has been found (Lidz et al. 2003). But just one, as far as I can tell (in 2021).

## Glossary

**Affect Heuristic** In the context of moral psychology, the Affect Heuristic is this principle: 'if thinking about an act [...] makes you feel bad [...], then judge that it is morally wrong' (Sinnott-Armstrong et al. 2010). These authors hypothesise that the Affect Heuristic explains moral intuitions.

A different (but related) Affect Heuristic has also be postulated to explain how people make judgements about risky things are: The more dread you feel when imagining an event, the more risky you should judge it is (see Pachur et al. 2012, which is discussed in ??). 2, 8, 10



**characteristically consequentialist** According to Greene, a judgement is *characteristically consequentialist* (or \*characteristically utilitarian\*) if it is one in ‘favor of characteristically consequentialist conclusions (eg, “Better to save more lives”)’ (Greene 2007, p. 39). According to Gawronski et al. (2017, p. 365), ‘a given judgment cannot be categorized as [consequentialist] without confirming its property of being sensitive to consequences.’ 6, 7, 12

**characteristically deontological** According to Greene, a judgement is *characteristically deontological* if it is one in ‘favor of characteristically deontological conclusions (eg, “It’s wrong despite the benefits”)’ (Greene 2007, p. 39). According to Gawronski et al. (2017, p. 365), ‘a given judgment cannot be categorized as deontological without confirming its property of being sensitive to moral norms.’ 7, 12

**distal outcome** The outcomes of an action can be partially ordered by the cause-effect relation. For one outcome to be more *distal* than another is for it to be lower with respect to that partial ordering. To illustrate, if you kick a ball through a window, the window’s breaking is a more distal outcome than the kicking. 4–7

**Drop** A dilemma; also known as *Footbridge*. A runaway trolley is about to run over and kill five people. You can hit a switch that will release the bottom of a footbridge and one person will fall onto the track. The trolley will hit this person, slow down, and not hit the five people further down the track. Is it okay to hit the switch? 13

**dual-process theory** Any theory concerning abilities in a particular domain on which those abilities involve two or more processes which are distinct in this sense: the conditions which influence whether one mindreading process occurs differ from the conditions which influence whether another occurs. 2, 4, 6, 8, 10, 11

**fast** A *fast* process is one that is to some interesting degree cognitively efficient (and therefore likely also some interesting degree automatic). These processes are also sometimes characterised as able to yield rapid responses.

Since automaticity and cognitive efficiency are matters of degree, it is only strictly correct to identify some processes as faster than others.

The fast-slow distinction has been variously characterised in ways that do not entirely overlap (even individual author have offered differing characterisations at different times; e.g. Kahneman 2013; Morewedge & Kahneman 2010; Kahneman & Klein 2009; Kahneman 2002): as its

advocates stress, it is a rough-and-ready tool rather than an element in a rigorous theory. 4, 8–10, 13

**Moral Foundations Theory** The theory that moral pluralism is true; moral foundations are innate but also subject to cultural learning, and the Social Intuitionist Model of Moral Judgement is correct (Graham et al. 2019). Proponents often claim, further, that cultural variation in how these innate foundations are woven into ethical abilities can be measured using the Moral Foundations Questionnaire (Graham et al. 2009; Graham et al. 2011). Some empirical objections have been offered (Davis et al. 2016; Davis et al. 2017; Doğruyol et al. 2019). See ?? 2, 8, 11

**moral intuition** According to this lecturer, a person's intuitions are the claims they take to be true independently of whether those claims are justified inferentially. And a person's *moral* intuitions are simply those of their intuitions that concern ethical matters.

According to Sinnott-Armstrong et al. (2010, p. 256), moral intuitions are 'strong, stable, immediate moral beliefs.' 12, 13

**moral pluralism** Descriptive moral pluralism is the view that humans' ethical abilities involve distinct moral concerns (such as harm, equality and purity) which are not reducible to just one moral concern. 3

**moral reframing** 'A technique in which a position an individual would not normally support is framed in a way that it is consistent with that individual's moral values. [...] In the political arena, moral reframing involves arguing in favor of a political position that members of a political group would not normally support in terms of moral concerns that the members strongly ascribe to' (Feinberg & Willer 2019, pp. 2–3). 2, 7, 13

**moral sense** A 'tendency to see certain actions and individuals as right, good, and deserving of reward, and others as wrong, bad, and deserving of punishment' (Hamlin 2013, p. 186). 14

**not-justified-inferentially** A claim (or premise, or principle) is not-justified-inferentially if it is not justified in virtue of being inferred from some other claim (or premise, or principle).

Claims made on the basis of perception (\*That jumper is red\*, say) are typically not-justified-inferentially.

Why not just say 'noninferentially justified'? Because that can be read as implying that the claim is justified, noninferentially. Whereas 'not-

justified-inferentially' does not imply this. Any claim which is not justified at all is thereby not-justified-inferentially. 2, 3, 13

**Social Intuitionist Model of Moral Judgement** A model on which intuitive processes are directly responsible for moral judgements (Haidt & Bjorklund 2008). One's own reasoning does not typically affect one's own moral judgements, but (outside philosophy, perhaps) is typically used only to provide post-hoc justification after moral judgements are made. Reasoning does affect others' moral intuitions, and so provides a mechanism for cultural learning. 11

**Trolley** A dilemma; also known as *Switch*. A runaway trolley is about to run over and kill five people. You can hit a switch that will divert the trolley onto a different set of tracks where it will kill only one. Is it okay to hit the switch? 13

## References

- Bago, B. & De Neys, W. (2019). The Intuitive Greater Good: Testing the Corrective Dual Process Model of Moral Cognition. *Journal of Experimental Psychology: General*, 148(10), 1782–1801.
- Bandura, A. (2002). Selective Moral Disengagement in the Exercise of Moral Agency. *Journal of Moral Education*, 31(2), 101–119.
- Baron, J. & Gürçay, B. (2017). A meta-analysis of response-time tests of the sequential two-systems model of moral judgment. *Memory & Cognition*, 45(4), 566–575.
- Bartels, D. M. (2008). Principled moral sentiment and the flexibility of moral judgment and decision making. *Cognition*, 108(2), 381–417.
- Białek, M. & De Neys, W. (2017). Dual processes and moral conflict: Evidence for deontological reasoners' intuitive utilitarian sensitivity. *Judgment and Decision Making*, 12(2), 148.
- Capraro, V., Everett, J. A. C., & Earp, B. D. (2019). Priming intuition disfavors instrumental harm but not impartial beneficence. *Journal of Experimental Social Psychology*, 83, 142–149.
- Chapman, H. A. & Anderson, A. K. (2013). Things rank and gross in nature: A review and synthesis of moral disgust. *Psychological Bulletin*, 139(2), 300–327.

- Conway, P. & Gawronski, B. (2013). Deontological and utilitarian inclinations in moral decision making: A process dissociation approach. *Journal of personality and social psychology*, 104(2), 216–235.
- Davis, D., Dooley, M., Hook, J., Choe, E., & McElroy, S. (2017). The Purity/Sanctity Subscale of the Moral Foundations Questionnaire Does Not Work Similarly for Religious Versus Non-Religious Individuals. *Psychology of Religion and Spirituality*, 9(1), 124–130.
- Davis, D., Rice, K., Tongeren, D. V., Hook, J., DeBlaere, C., Worthington, E., & Choe, E. (2016). The Moral Foundations Hypothesis Does Not Replicate Well in Black Samples. *Journal of Personality and Social Psychology*, 110(4).
- Doğruyol, B., Alper, S., & Yilmaz, O. (2019). The five-factor model of the moral foundations theory is stable across WEIRD and non-WEIRD cultures. *Personality and Individual Differences*, 151, 109547.
- Feinberg, M. & Willer, R. (2019). Moral reframing: A technique for effective and persuasive communication across political divides. *Social and Personality Psychology Compass*, 13(12), e12501.
- Gawronski, B., Armstrong, J., Conway, P., Friesdorf, R., & Hütter, M. (2017). Consequences, norms, and generalized inaction in moral dilemmas: The CNI model of moral decision-making. *Journal of personality and social psychology*, 113(3), 343–376.
- Graham, J., Haidt, J., Motyl, M., Meindl, P., Iskiwitch, C., & Mooijman, M. (2019). Moral Foundations Theory: On the advantages of moral pluralism over moral monism. In K. Gray & J. Graham (Eds.), *Atlas of Moral Psychology*. New York: Guilford Publications.
- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, 96(5), 1029–1046.
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of Personality and Social Psychology*, 101(2), 366–385.
- Greene, J. D. (2007). The Secret Joke of Kant's Soul. In W. Sinnott-Armstrong (Ed.), *Moral Psychology, Vol. 3* (pp. 35–79). MIT Press.
- Greene, J. D. (2014). Beyond Point-and-Shoot Morality: Why Cognitive (Neuro)Science Matters for Ethics. *Ethics*, 124(4), 695–726.
- Gürçay, B. & Baron, J. (2017). Challenges for the sequential two-system model of moral judgement. *Thinking & Reasoning*, 23(1), 49–80.

- Haidt, J. & Bjorklund, F. (2008). Social intuitionists answer six questions about moral psychology. In W. Sinnott-Armstrong (Ed.), *Moral Psychology, Vol 2: The Cognitive Science of Morality: Intuition and Diversity* chapter 4, (pp. 181–217). Cambridge, Mass: MIT press.
- Hamlin, J. K. (2013). Moral Judgment and Action in Preverbal Infants and Toddlers: Evidence for an Innate Moral Core. *Current Directions in Psychological Science*, 22(3), 186–193.
- Hamlin, J. K., Wynn, K., Bloom, P., & Mahajan, N. (2011). How infants and toddlers react to antisocial others. *Proceedings of the National Academy of Sciences*, 108(50), 19931–19936.
- Kahneman, D. (2002). Maps of bounded rationality: A perspective on intuitive judgment and choice. In T. Frangmyr (Ed.), *Le Prix Nobel, ed. T. Frangmyr, 416–499.*, volume 8 (pp. 351–401). Stockholm, Sweden: Nobel Foundation.
- Kahneman, D. (2013). *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux.
- Kahneman, D. & Klein, G. (2009). Conditions for intuitive expertise: A failure to disagree. *American Psychologist*, 64(6), 515–526.
- Koop, G. J. (2013). An assessment of the temporal dynamics of moral decisions. *Judgment and decision making*, 8(5), 527.
- Kosslyn, S. M. (1978). Measuring the visual angle of the mind's eye. *Cognitive Psychology*, 10(3), 356–389.
- Landy, J. F. & Goodwin, G. P. (2015a). Does incidental disgust amplify moral judgment? A meta-analytic review of experimental evidence. *Perspectives on Psychological Science*, 10(4), 518–536.
- Landy, J. F. & Goodwin, G. P. (2015b). Our conclusions were tentative, but appropriate: A reply to schnall et al.(2015). *Perspectives on Psychological Science*, 10(4), 539–540.
- Lidz, J., Waxman, S., & Freedman, J. (2003). What infants know about syntax but couldn't have learned: experimental evidence for syntactic structure at 18 months. *Cognition*, 89(3), 295–303.
- Luke, D. M. & Gawronski, B. (2021). Political Ideology and Moral Dilemma Judgments: An Analysis Using the CNI Model. *Personality and Social Psychology Bulletin*.

- Morewedge, C. K. & Kahneman, D. (2010). Associative processes in intuitive judgment. *Trends in Cognitive Sciences*, 14(10), 435–440.
- Nichols, S. (2004). *Sentimental rules: On the natural foundations of moral judgment*. Oxford: Oxford University Press.
- Pachur, T., Hertwig, R., & Steinmann, F. (2012). How Do People Judge Risks: Availability Heuristic, Affect Heuristic, or Both? *Journal of Experimental Psychology: Applied*, 18(3), 314–330.
- Pogge, T. W. M. (2005). World Poverty and Human Rights. *Ethics & International Affairs*, 19(1), 1–7.
- Pullum, G. K. & Scholz, B. C. (2002). Empirical assessment of stimulus poverty arguments. *The Linguistic Review*, 18(1-2).
- Singer, P. (2005). Ethics and Intuitions. *The Journal of Ethics*, 9(3), 331–352.
- Sinnott-Armstrong, W., Young, L., & Cushman, F. (2010). Moral intuitions. In J. M. Doris, M. P. R. Group, et al. (Eds.), *The moral psychology handbook* (pp. 246–272). Oxford: OUP.
- Suter, R. S. & Hertwig, R. (2011). Time and moral judgment. *Cognition*, 119(3), 454–458.
- Tinghög, G., Andersson, D., Bonn, C., Johannesson, M., Kirchler, M., Koppel, L., & Västfjäll, D. (2016). Intuition and Moral Decision-Making – The Effect of Time Pressure and Cognitive Load on Moral Judgment and Altruistic Behavior. *PLOS ONE*, 11(10), e0164012.