# On the Possibility of Intuitive and Deliberative Processes Working in Parallel in Moral Judgment

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> **Is moral judgment intuitive or deliberative?**
>
> The parallel morality hypothesis suggests that the answer is both, such that intuitive and deliberative processes operate in parallel to drive moral judgment, and there is an asymmetry such that deliberative processes are more easily impaired than intuitive processes (the former needing more cognitive resources and motivated correction than the latter).

In this chapter, I focus on the issue of how people form judgments of morality and social justice. That is, how do people come to ascertain that something is right or wrong? An important issue pertaining to this question is the debate about whether people primarily rely on their gut feelings, automatic affective reactions, and other intuitive processes to assess what they think is right and wrong or whether morality and justice judgments are derived by careful conscious reasoning, rationalistic thought, and other deliberative processes (see, e.g., Beauchamp, 2001). A main aim of the current chapter is to argue that both intuitive and deliberative processes are important in understanding the psychology of moral judgment.

More precisely, I argue that, when people form moral judgments, there is a good pos-sibility that intuitive and deliberative processes tend to operate in parallel. That is, the parallel morality hypothesis that I put forward here suggests that intuitive and deliberative processes simultaneously influence the construction of moral judgments. However, there is an asymmetry such that it may be more likely that deliberative processes are impaired to some extent than intuitive processes are. This asymmetry is proposed because it can be assumed that intuitive processes are more automatic and need fewer cognitive resources and are less affected by motivation to correct for self-interested impulses than deliberative processes do. This suggests that people's capa-bility and motivation to reason should have strong effects on the exact moral judgments that people construct.

One way to test the parallel morality hypothesis is to examine people's reactions in situations in which they are suddenly better off than comparable other persons. For example, imagine that you are a student who had a job last summer, together with a fellow student. The two of you worked together in a pair. You and your fellow student have worked equally hard and performed equally well. On the last day of summer, you receive a bonus of $500 U.S. Your fellow student receives a bonus of $250 U.S. How satisfied are you with the bonus you received?

Or imagine that you are going to live in a new rented house. The rent of this house has yet to be determined. To decide on the rent, each individual tenant has to appear before a rent tribunal. The rent tribunal will decide on the monthly rent that you will have to pay. To determine this rent, your neighbor, who will rent a comparable house, also has to appear before the rent tribunal. A week after you and your neighbor have been at the tribunal, you are informed that the rent that you will have to pay is $750. Your neighbor will have to pay $1,000. How satisfied are you with the rent that you will have to pay?

Last example: Consider yourself participating in a study on how people perform tasks. In the experiment, you work on certain tasks for 10 minutes. You participate in the experiment with another person, who completes a similar amount of tasks within the 10 minutes. At the end of the study the experimenter gives you three lottery tickets with which you can win $200. The other participant receives only one lottery ticket. How satisfied are you with your lottery tickets?

These examples represent cases in which people react to situations in which they are overpaid, as their outcomes are better than the outcomes of comparable other persons (Adams, 1965; Austin, McGinn, & Susmilch, 1980; Buunk & Van Yperen, 1989). People's levels of satisfaction with these arrangements of advantageous inequity represent a combination of conflicting social motives (Van den Bos, Peters, Bobocel, & Ybema, 2006). A positive source of affect is derived from the egoism-based pleasure of receiving a relatively good outcome. A source of negative affect is provided by the fairness-based feeling of being unfairly advantaged (Van den Bos, Lind, Vermunt, &

Wilke, 1997). Thus both (self-oriented) preferences and (other-oriented) fairness considerations are influencing satisfaction with advantageous inequity (Van den Bos, Wilke, Lind, & Vermunt, 1998).

People usually will know whether their outcome gives them pleasure before they have insight into the fairness aspects of the outcome distribution (e.g., Epley & Caruso, 2004; Epley, Morewedge, & Keysar, 2004; Messick & Sentis, 1979, 1983; Moore & Loewenstein, 2004; Van den Bos et al., 2006). For example, Messick and Sentis (1979, 1983), state that people generally have more immediate access to or knowledge of their preferences than of what is fair, and they usually know their preferences before they know what is fair. In other words, preference is primary (Zajonc, 1980) and people assess whether and how fairness is relevant in a later phase (possibly almost immediately). Related to this, Moore and Loewenstein (2004) argue that self-interest is automatic, viscerally compelling, and typically unconscious, whereas paying attention to fairness concerns is usually a more thoughtful process. Similarly, Epley and Caruso (2004) propose that people automatically interpret objects and events egocentrically and only subsequently correct or adjust that interpretation when necessary. The automatic default occurs rapidly, but correction requires time and attentional resources (Epley et al., 2004).

Extending this line of reasoning one step further, what I am proposing here is that self-oriented preferences tend to influence people's reactions spontaneously and constantly, whereas other-oriented fairness concerns demand (at least somewhat) more deliberation and hence more cognitive resources and more motivation to correct for self-oriented intuitions than preferences do. Thus I am suggesting that self-oriented preferences and other-oriented fairness concerns may work in parallel, with the former being more automatic and more continuously influencing of people's reactions than the latter.

## Historical Context

The parallel morality hypothesis reflects the broad debate between intuition and deliberation in morality and justice. Ever

since the days of Aristotle, Aristippus, and Plato, there have been arguments in moral philosophy and philosophical ethics that either intuitionist or rationalist conceptions of justice are true (for an overview, see, e.g., Beauchamp, 2001). For example, on the one hand, there are theorists who argue that morality and justice judgments are derived from feelings, not from reasoning (e.g., Hume, 1739/1951). On the other hand, there are ethicists who conceive of morality and justice as predominantly principles that can be defined by reference to objective standards of right and wrong (e.g., Hare, 1981; Rawls, 1971/1992) and who develop rationalistic ethical theories that attempt to deduce a foundation for ethics from the meaning of rationality itself (e.g., Kant, 1785/1959).

Similarly, in the literature on moral psychology, there are debates between intuitionists, who argue that people's intuitive feelings about what is right or wrong cause moral judgments and that moral reasoning is usually a post hoc construction generated after moral judgments have been reached (e.g., Haidt, 2001; Kagan, 1984; Wilson, 1993), and rationalists, who state that moral judgments are caused primarily by processes of cognitive reasoning (e.g., Kohlberg, 1969; Piaget, 1932/1975; Turiel, 1983).

In short, in the history of morality and social justice, there tend to be two broad ways of thinking about morality and the justice concept that encompass many elements of the essence of moral judgment and social justice: Intuitionist notions suggest that morality and justice concerns are mainly the result of spontaneous or even automatic evaluations and are strongly influenced by subjective and affective factors, whereas rationalist theories emphasize that reasoning causes morality and justice judgments to be constructed primarily in a deliberate, objective, and cognitive way (for an overview, see Beauchamp, 2001).

The parallel morality hypothesis is important, I argue, because it reflects a more modern approach to how people form judgments of morality and justice (Strack & Deutsch, 2003). That is, rather than continuing the age-old and ongoing controversy between intuitive and deliberative models of morality and justice, focusing on whether morality and justice are best characterized by *either* spontaneous affective reactions *or* careful conscious reasoning, the view I propose adopts an integrative approach focusing on the simultaneous operation of both intuitive *and* deliberative processes in the formation of moral judgment and justice and fairness concerns. Examining the possibility that intuitive and deliberative processes may work in parallel may help to overcome, solve, or perhaps sidestep important aspects of the ancient and ongoing impasse of believing in either intuitionist or rationalist conceptions (see, e.g., Haidt, 2003, vs. Pizarro & Bloom, 2003).

The hypothesis that I put forward here argues that it makes more sense and that it is scientifically more exciting to adopt an integrative approach, in which social conditions are studied that affect the relative importance of intuitive and deliberative conceptions. Viewed in this way, the parallel morality hypothesis constitutes a modern, process-oriented approach to the interplay of social psychological factors that, combined, are likely to have an impact on the formation of moral and justice judgments and examines how these concerns affect people's reactions and how individuals interact with other people and how they behave in society.

## Theoretical Stance

The parallel morality hypothesis is related to approaches that focus on initial self-centered gut reactions to unfair situations followed by controlled attempts to correct these first reactions. In this respect, the hypothesis is similar to earlier work on people's responses to various outcome distributions (see, e.g., Epley & Caruso, 2004; Epley et al., 2004; Knoch, Pascual-Leone, Meyer, Treyer, & Fehr, 2006; Messick & Sentis, 1979, 1983; Moore & Loewenstein, 2004). The hypothesis is differentiated from these earlier dual-process studies by its emphasis on the possibility that intuitive and deliberative processes may work in parallel.

The parallel quality of intuitive and deliberative processes is also present in more general models on how people process information that have noted that intuitive and deliberative processes operate in parallel as two independent systems that can be concurrently active and compete for dominance in overt responses (see, e.g., Strack & Deutsch,

2004; see also Gilovich & Griffin, 2002; Kahneman & Frederick, 2002). The parallel morality hypothesis differs somewhat from these other two-systems models in its proposition that intuitive and deliberative processes tend to be consequently invoked such that intuitive processes in general are more spontaneously invoked than deliberative processes are. The parallel morality hypothesis is also differentiated from these more general psychological models by its focus on morality and justice concerns.

The hypothesis that I put forward is different from notions that suggest that prosocial reactions are spontaneous and intuitive (e.g., Rand, Greene, & Nowak, 2012). The hypothesis also differs from ideas ventilated in the literature that justice concerns are genuine and have nothing to do with or outweigh egocentric responses (see, e.g., Lerner, 2003; Lerner & Goldberg, 1999). The hypothesis is also different from theories that adopt either an intuitionist (see, e.g., Haidt, 2001) or a rationalistic (Kant, 1785/1959) approach to the study of morality and social justice.

## Evidence

There are important research findings that support important components of the hypothesis put forward here. Some components of the hypothesis are yet to be tested thoroughly (which is the primary reason that I put forward the parallel morality hypothesis as a "hypothesis," not as a "model" and certainly not as a "theory"). And some evidence reported in the literature seems to be inconsistent with the hypothesis. This section reviews very briefly some evidence for the hypothesis and also indicates evidence that is as yet missing, as well as suggestions that contradict my line of reasoning.

Data that support important components of the hypothesis put forward here come from various sources. Here, I focus on reactions to advantageous inequity, acceptance or rejection of unfair offers in ultimatum games, and what information children and adults look at during a perspective-taking task.

Van den Bos et al. (2006) examined how satisfied people are with outcomes that are better than the outcomes of comparable other persons. Building on classical and modern social psychological theories, we argued that when individuals are reacting to these arrangements of advantageous inequity, judging the advantage is quick and easy, as self-interested preferences are primary (Messick & Sentis, 1983; see also Zajonc, 1980). We further proposed that adjusting this appraisal requires cognitive resources, as it entails integrating fairness concerns with the initial preference appraisal. We investigated this hypothesis in a number of different experiments using different paradigms and different manipulations. Common elements in our experiments were that we varied whether participants' cognitive processing was either strongly or weakly limited while responding to the stimulus materials (see, e.g., Gilbert, Pelham, & Krull, 1988; Gilbert & Osborne, 1989; see also Wegner & Erber, 1992). Furthermore, in all experiments, advantageous inequity conditions were included in which participants received an outcome that was better than the outcome of a comparable other person, and the main dependent variable was participants' outcome satisfaction evaluations. Findings thus obtained indeed showed that participants are more satisfied with advantageous inequity when they are under high (as opposed to low) cognitive load.

Knoch et al. (2006) examined whether people accept or reject unfair offers made to them by other participants in ultimatum games. The authors argued that people's first reactions to the unfair offers are such that they are inclined to satisfy their self-interested needs, and controlling this self-interested impulse overrides this primary impulse. The dorsolateral prefrontal cortex (DLPFC) is involved in the control of impulsive reactions. Thus impairing the DLPFC by low-frequency repetitive transcranial magnetic stimulation (rTMS) will inhibit the control function of the DLPFC and thus strengthen the self-interest motive. Knoch et al. (2006) indeed showed that inhibiting the right DLPFC substantially reduced people's willingness to reject their partners' intentionally unfair offers in ultimatum bargaining games. These findings suggest that control is needed to fight or resist unfairness.

Epley et al. (2004) tested a related line of reasoning by tracking children's and adults' eye movements as they completed a perspec-

tive-taking task. Results obtained from an experiment conducted in the Children's Museum of Boston suggested that both children and adults automatically interpret objects and events egocentrically and only subsequently correct or adjust that interpretation when necessary. These findings indicate that the automatic default occurs rapidly but that correction requires time and attentional resources. Furthermore, children generally behave more egocentrically than adults when assessing another's perspective. This difference does not, however, indicate that adults process information less egocentrically than children, but rather that adults are better able to subsequently correct an initial egocentric interpretation.

A line of reasoning that ostensibly contradicts what I am proposing here comes from some aspects of Lerner's just-world theory that suggest that genuine justice concerns outweigh more egocentric responses (e.g., Lerner, 2003; Lerner & Goldberg, 1999). I think that this, indeed, may be the case in some circumstances—for example, when someone sacrifices his or her own life to safe the life of another person who is completely unrelated to him or her, in an act of true altruism (see also Batson, 1991, 1998). However, please note that although the findings briefly reviewed here suggest that people's primitive core may sometimes (e.g., when their cognitive capacities have been severely limited) push them in an egocentric direction, it may well be the case that frequently people try to free cognitive resources to do the right thing. Thus morality, fairness, and justice concerns are frequently a very real concern to people (Van den Bos et al., 2006; see also Staub, 1989, 2011). Furthermore, it may well be that for the majority of people, the genuine self seems to be a prosocial self (Van den Bos, Van Lange, et al., 2011). Thus my hypothesis is that genuine concerns for fairness tend to correct self-interested impulses most of the time (but not always) among most (but not all) individuals (Van den Bos, 2015; see also Miller, 1999).

Data that could truly falsify the line of reasoning put forward here would need to indicate that fairness and morality concerns are more primary than egocentric tendencies are. Rand et al. (2012) presented some findings that exactly tested this alternative prediction. These authors argued that coop-

eration is central to human social behavior and that cooperation is intuitive because cooperative heuristics are developed in daily life, in which cooperation is typically advantageous. Findings obtained from different economic games suggest that forcing participants to decide quickly increases cooperative behavior, whereas instructing them to reflect and forcing them to decide slowly decreases cooperation. Furthermore, priming participants to trust their intuitions increases cooperation with primes that induce deliberative reflection. According to the authors of this intriguing paper, these results suggest that intuition supports cooperation in social dilemmas and that reflection can undermine these cooperative impulses. These findings are, indeed, very interesting. However, the notion that reflection can undermine cooperative impulses can be explained by Miller's (1999) notion that, upon reflection, people tend to adhere to a norm of self-interest because they think their culture (and perhaps especially a North American culture; see, e.g., Henrich, Heine, & Norenzayan, 2010a, 2010b) tends to value self-interest over fairness and morality concerns.

Moreover, data that well could falsify an important component of the parallel morality hypothesis include findings from recent studies that suggest that people can engage in successful response inhibition of hedonistic impulses. For example, Veling, Aarts, and Papies (2011) show that stop signals can inhibit chronic dieters' responses toward palatable foods. Furthermore, Veling and Van Knippenberg (2006) note that forming intentions can inhibit responses to distracting stimuli, and recent evidence suggests that arousal can modulate response inhibition (Weinbach, Kalanthroff, Avnit, & Henik, 2015) and that medial prefrontal cortical regions contribute in important ways to conditioned inhibition (Meyer & Bucci, 2014). Importantly, when people are able to inhibit spontaneous egocentric responses to such an extent that these responses are not really there anymore for a long time, this would falsify the claim of my hypothesis that both self-centered and fairness/morality concerns tend to operate in parallel. Indeed, successful response inhibition of self-centered intuitions in the morality and justice domains would suggest that a dual-process account of intuitive and deliberative concerns is more

appropriate than a framework that suggests that these concerns work in parallel. In fact, I ground important components of my line of reasoning on earlier studies that explicitly can be viewed as instances of a dual-process approach to self-centered and deliberate correction processes (see, e.g., Epley et al., 2004). Furthermore, precisely because conclusive evidence for the "parallel" component of the parallel morality hypothesis is missing, I explicitly put forward the prediction as it is, a hypothesis. Clearly, tight data need to be collected to show or falsify the parallel component of the hypothesis.

Personally, I think that full and constant inhibition such that self-centered preferences are not active anymore for a long time is rather unlikely. That is, I think that self-centered reactions can be inhibited, but to me it seems likely that these reactions will also kick back and start affecting people's reactions once more. For example, we can inhibit hedonistic responses to palatable food (Veling et al., 2011), but dieters will also tell that it is hard to constantly inhibit the responses to eat all those many things that we like but that are bad for us and our diet. Thus, I note that definitely more research is needed to sort out the strength and long-term effects of response inhibition of self-centered impulses, including egocentric intuitions in the morality and justice domains. This aspect and other aspects of the hypothesis put forward here can now be tested in detail in future research.

## Extension and Expansion

The real-world implications of the parallel morality hypothesis are such that people's responses and behaviors may indeed often reflect both intuitive and deliberative processes. These processes may or may not be related to self-centered and other-oriented reactions, respectively. Thus, intuitive processes may not always reflect self-interested responses, and deliberative processes may not necessarily reflect other-oriented concerns. Future research can and should test the various components of the parallel morality hypothesis in detail.

One area to which this line of reasoning could be extended is the domain of psychol-ogy and law. For example, intuition and deliberation may simultaneously influence the decisions of judges. Research could try to test the possible parallel operation of emotion-driven impulses to what is described in legal files and rationalistic, deliberative thoughts about how laws and legal rules apply precisely to what happened in the legal issues at hand.

In the last two decades or so, psychology has moved away from rationalistic and deliberative thinking and paid much attention to intuitive and fast decision making. This has yielded great developments in the field of psychological science. However, now is the time, I argue, to start paying more attention to the unique reasoning capabilities that humans have. Coupled with the ideals of the Enlightenment (and associated prescriptive assumptions present in Kantian philosophy), this could reveal the positive aspects of careful and deliberative thought about right and wrong and the important role that conscious processes play in this (see also Baumeister & Masicampo, 2010), quite possibly in addition or parallel to more intuitive and affect-driven processes (such as initial egocentric responses to advantageous injustice).

Studying these issues could perhaps also reveal that moral judgments derived by deliberate reasoning are qualitatively different from impressions of what is right or wrong derived from relying on gut feelings. Interestingly, work in other domains seems to be related to this issue, such as research on more automatic and more controlled components of stereotypes and prejudice (see, e.g., Devine, 1989; see also Gilbert et al., 1988; Kawakami, Dovidio, Moll, Hermsen, & Russin, 2000). The domain of psychology and law could yield good testing ground to examine the interplay between intuitive and deliberative, as well as spontaneous and controlled, processes in detail.

Another domain that may or may not be related to intuitive and deliberative parallel processes as discussed here is the area of behavioral activation and inhibition systems. Many psychologists had good reasons to consider behavioral activation and inhibition as constituting independent systems (e.g., Carver & White, 1994; Gable, Reis, & Elliot, 2000; Gray & McNaughton, 2000), but current cognitive psychologists also tend

to focus on the interaction between activating and inhibitory processes (e.g., Knyazev, Schutter, & Van Honk, 2006). Related to this is work on moral disengagement that examines the deactivation of self-regulatory processes that can inhibit unethical behavior (e.g., Bandura, 1990, 1996). Processes of moral disengagement can lead people to convince themselves that certain ethical standards do not apply to themselves in particular situations, for instance, by disabling cognitive mechanisms of self-condemnation (but see Reynolds, Dang, Yam, & Leavitt, 2014). Whether behavioral activation and inhibition can operate in parallel ways when responding to issues of morality and social justice is a topic that needs further conceptual exploration and empirical examination (Van den Bos & Lind, 2013).

Importantly, other issues of right and wrong besides the topics briefly reviewed here need to be examined in detail. These issues include, but are not limited to, research on moral dilemmas (e.g., Van den Bos, Müller, & Damen, 2011) and the belief in a just world (e.g., Bal & Van den Bos, 2012; Van den Bos & Maas, 2009). The moderating effects of culture (e.g., Van den Bos et al., 2010; Van den Bos, Brockner, Van den Oudenalder, Kamble, & Nasabi, 2013; Van den Bos, Van Veldhuizen, & Au, 2015), social value orientations (e.g., Van den Bos, Van Lange, et al., 2011), and social psychological concepts such as ego depletion (Loseman & Van den Bos, 2012) need to be taken into consideration as well.

In conclusion, the current chapter argues that moral judgment may be an intuitive and a deliberative phenomenon, best characterized by two processes working in parallel. In delineating some thoughts about these issues, I hope to have conveyed that it may be conducive to the fields of morality and social justice (broadly defined) to start examining the intriguing possibility that intuitive and deliberative processes work in parallel in moral judgment.

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