

On Higher Ground: Moral Thinking Leads to Abstract Processing

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EXTENDED ABSTRACT

We often describe people who do the “right” thing as being “on a moral high ground”, or we say that they are “taking the high road”. There are also other similar sayings that refer to people behaving morally as “high-minded” or “upstanding” individuals. All of these images suggest a metaphorical connection between the concept of morality and the spatial orientation of vertical height. Specifically, they suggest that people who behave morally hold a position that is higher above ground than those who behave less morally. But are there cognitive consequences of being so high above ground – and thus, so *distant* to the world “down below” – that they would process their world differently?

Recent research on metaphorical thinking adopts an embodied cognition view, suggesting that people use their concrete physical sensations to describe abstract psychological experiences (Bargh 2006; Boroditsky and Ramscar 2002). For example, metaphors involving vertical height often have an embodied basis. In contexts of social power, powerful people are said to be “up high”, such that individuals with social authority attend to high spatial locations quicker than low ones (Moeller, Robinson and Zabelina 2008). In many religions, “God is most high”, and people perceive others as being more religious when their pictures are displayed at the top of a page rather than the bottom (Chasteen, Burdzy, and Pratt 2009). And people often give “thumbs up” to communicate positive feedback, stemming from the perception that anything “up” is good but “down” is bad (Meier and Robinson 2004). These findings suggest that moral metaphors referring to vertical height or the physical sensation of being high above ground may also have a similar embodied basis.

We posit that a consequence of behaving morally is that the vertical height increases the *distance* to the world down below, affecting how people high above ground would cognitively process their world. According to construal level theory, as distance (vs. closeness) increases, so does abstract processing (Trope and Liberman 2003). Consider spectators sitting in the highest rows of a sports stadium, and hence are vertically high from where the main action is located. They describe their experiences as “squinting to see ant-sized players”, and only see the broader aspects of the game, not its finer details. Building on these links between metaphorical thinking, embodied cognition, and construal level theory, we thus hypothesize and find in four experiments that people who do the right thing process their world abstractly.

Experiment 1 demonstrated the main effect that moral thinking leads to abstract processing. To prime moral or less moral thinking, we had undergraduate students write about an instance in their lives in which they did the “right” or “wrong” thing, respectively. They then completed the Behavioral Identification Form (BIF; Vallacher and Wegner 1989). As predicted, participants who recalled behaving morally selected more abstract descriptions on the BIF than those who recalled behaving less morally. We also ruled out mood as an alternative explanation for our findings.

Experiments 2 and 3 aimed to explore how moral thinking may influence specific cognitive consequences of abstract thinking. In Experiment 2, we reason that people who process abstractly pay little attention to details, and so they should be worse at analytical reasoning than those who process concretely (Friedman and Förster 2011). To prime moral or less moral thinking, we had undergraduates write stories about themselves using either positively- or negative-

ly-valenced words, such as *kind* or *greedy*, respectively. They then completed the Cognitive Reflection Test (CRT; Frederick 2005). As expected, participants in the moral prime scored lower on the CRT than those in the less moral prime. Mood had no effect. Meanwhile, in Experiment 3, we hypothesized that people who do the right thing are more creative than those who do the wrong thing (Förster, Epstude, and Özelsel 2009). Undergraduates received the same prime as Experiment 1, in addition to a control condition. They then generated as many creative ways of using a brick as possible. Planned contrasts revealed that participants in the moral prime generated more ways to use a brick creatively than those in the control, who generated more than those in the less moral prime.

Finally, Experiment 4 examined how moral thinking may influence consumer preferences. Mechanical Turk participants received the same moral or less prime as Experiment 1. They then saw an ad for the “Simply Orange” brand of orange juice that emphasized either the brand’s abstract, future benefits or its concrete, immediate benefits. Participants who recalled behaving morally had more favourable attitudes toward Simply Orange when the ad was in an abstract than a concrete frame. Conversely, participants who recalled behaving less morally had more favourable attitudes toward the ad in a concrete than an abstract frame.

Across four experiments, this research demonstrates that metaphors like “on a high ground” and “taking the high road” are linked to embodied cognitions. More specifically, this link can cause people doing the right thing to subsequently process their world abstractly. Our findings may also offer another explanation for other consequences of moral thinking, such as licensing. Furthermore, our present findings encourage future research to understand morality not in isolation, but in terms of physically-grounded concepts.

Table 1
Experiment 2: Correct responses on the CRT.

	Ball/Bat	Widgets	Lily Pads	Total
Moral Thinking (<i>N</i> = 100)	42.7%	39.2%	36.8%	.81
Less Moral Thinking (<i>N</i> = 112)	58.3%	60.8%	63.2%	1.14
<i>p</i> -level	.241	.059	.008	.027

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