

# Exploring the Dark Side of Morality

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Dr Jean Decety



# EXPLORING THE DARK SIDE OF MORALITY

Social and moral values can inspire change and positive action, yet they can also prompt divisions in society, conflicts and violence.

**Dr Jean Decety**, a Professor at the University of Chicago, recently started investigating the mental and neural mechanisms associated with strong moral convictions and the support for violent acts. His work examines the dark side of morality, pinpointing the brain processes underlying moralisation and its adverse consequences.

## How Social and Moral Values Guide Human Behaviour

Social values and moral norms play a crucial role in human societies, outlining how humans should behave and cooperate with others. Social values are the standards that shape the social order in a group or society, while also delineating behaviours that are deemed acceptable and unacceptable. These social values can then be 'moralised' – or in other words, become moral norms that humans internalise and view as part of their own identity.

While moral norms are typically meant to limit conflicts and promote social cooperation (for instance, suggesting that humans should not intentionally harm others), they sometimes paradoxically fuel aggressive behaviours and divisiveness. In today's highly polarised world, many violent acts are motivated by moral values and by beliefs about what is 'right' or 'wrong'. We have recently seen how activists campaigning about climate change, racism, gender identity or economic inequality, for example, can become intolerant and violent. And it is certainly the case that extremist beliefs, ideologies, and attitudes exist on both the left and right of the political spectrum.

Wars, genocides, armed conflicts, honour killings and violent protests – these are only a few examples of how rigid moral convictions can result in the tragic loss of life. Often, the violent parties behind these acts believe that they are fighting for the 'right reasons' – guided by honourable social values despite the catastrophic effects of their actions.

Dr Jean Decety at the University of Chicago has been progressing our understanding of the mental and neural mechanisms underlying morally guided violence and conflict. His work pinpoints some of the processes that may underlie the increasingly polarised views of Western societies, currently reflected in political conflicts, opinionated popular media articles, and heated social media interactions on topics such as gender dysphoria, stem cell research, diversity and immigration.

## Moralisation, Cognitive Flexibility and Social Influence

Dr Decety has explored several processes through which humans integrate social values and moral norms. These crucial processes include moralisation, cognitive flexibility and social influence.



*Jean Decety scanning at the MRI Center, University of Chicago*

Moralisation occurs when people start representing individual preferences or neutral attitudes as moral values. Through the process of moralisation, beliefs and attitudes that were previously considered morally neutral acquire moral qualities. For instance, a person might strongly believe that abortion is fundamentally wrong and thus be morally opposed to it.

Moralisation leads to the development of moral convictions, which are strict beliefs about what is 'right' and what is 'wrong'. These unshakable beliefs can potentially relate to anything – veganism, abortion, immigration, capital punishment – and countless other diverse aspects of life. Beliefs held with moral conviction differ from strong opinions, in that they tend to be so rigid that they are viewed as universally and objectively true, oppositional in nature, and can even be used to justify violent acts.



Another focus that Dr Decety has explored is cognitive flexibility – the ability to switch between different ‘modes’ of thinking. This means recognising the difference between *opinions* (regardless of how strong they are) and *facts*, and accepting that the concepts of ‘right’ and ‘wrong’ can be subjective.

Cognitive flexibility also includes what is known as ‘metacognitive sensitivity’ – a person’s ability to accurately monitor and evaluate their own thinking processes, and also to adjust their behaviours and beliefs accordingly. Past studies have found that people with lower cognitive flexibility are more easily influenced by thinking biases and are also more likely to hold extreme political beliefs and support violent acts.

Dr Decety also has examined how social influence affects moralisation. Social influence is the process through which individuals align their preferences and behaviours by observing others in their community. This could mean, for instance, conforming to the beliefs of others or changing one’s opinion about something after discussing it with someone else.

### **Moral Conviction Overrides Aversion to Violence**

In a recent study, Dr Decety explored the psychological and neural mechanisms underpinning moral convictions and support for violence. Participants holding liberal political views were asked to complete a questionnaire in which they stated their moral convictions regarding socio-political issues, half of which were more liberal and the other half more conservative. These issues included abortion rights, the detention of migrant children, the Black Lives Matter campaign, climate change legislation, gun control, and several other contemporary hot and widely debated topics.

After they had expressed their moral convictions, the participants underwent functional magnetic resonance imaging (fMRI), an imaging technique that measures changes in blood oxygenation associated with brain activity. During scanning, they were shown images of violent political protests that were either aligned or in contradiction with the views

they expressed in the questionnaire, and asked to rate their appropriateness and support.

Analysis of the fMRI signals and the views expressed by participants allowed the researchers to determine what happened in the brain when violent images were congruent or incongruent with an individual’s beliefs. Notably, different activity patterns were observed in the ventromedial prefrontal cortex, ventral striatum and amygdala – three brain regions previously linked to moral norms and valuation processing. These patterns varied based on whether participants were presented with images that were congruent or incongruent with their moral convictions. Thus, moral conviction about socio-political issues serves to increase their subjective value, overriding our natural aversion to interpersonal harm.

### **Moralisation Alters Sensitivity to Social Influence**

In a follow-up study, Dr Decety examined how moral conviction and cognitive flexibility influence the mental processing of information during social decision-making. Participants completed a survey measuring their attitudes on socio-political issues, a perceptual confidence task to assess their metacognition. Then their neural activity was recorded using electroencephalography (EEG) while participants evaluated images of protests advocating for the same social issues they had just been asked about. But immediately before they were shown the images, they were given statistical information regarding the opinions of their peers on the same issues they rated before and asked if they confirmed their previous responses.

Dr Decety observed that people with strong moral convictions were less likely to change their responses after learning that the majority of their peers held opposing views, reflecting a lower metacognitive sensitivity. In addition, he found that while mentally processing images related to issues that they had a moral conviction about, the participants’ brain activity patterns reflected increased attention, emotion and greater engagement.

### **A Neurocognitive Perspective on Moral Conviction**

Dr Decety’s cognitive neuroscience research offers valuable insights into the mental and neural processes that underlie moral convictions and connection to violence. Given the polarised and intense social dynamics that we see across the globe about many issues – from climate change to gender identity, all hugely amplified by social media – this work has particular importance and relevance for progressing efforts aiming to reduce intransigent dogmatism and encouraging reasoning and productive dialogue. As moralisation has the potential to both inspire activism and change and also instigate divisiveness and great harm, it is important to understand the emotions, motivations and social factors that underlie and predict moralised opinions. Clearly, morality can both bind and blind us.



# Meet the researcher

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Dr Jean Decety is a Professor at the University of Chicago and Director of the Social Cognitive Neuroscience Laboratory. He holds a PhD in Neuroscience-Medicine, an MSc in Biological and Medical Engineering, and an MSc in Neurobiology from the University Claude Bernard (Lyon, France), as well as a Master of Arts and Science in Cognitive Psychology and a BA in Neuropsychology and Psychopathology from the University Lumière. Dr Decety has worked at the University of Chicago for almost two decades. Before that, he was the Head of the Social Cognitive Neuroscience Laboratory at the University of Washington and the Director of Research and Head of Neurophysiology of Intentionality at the INSERM in Lyon, France. His work spans a wide range of research areas, including affective neuroscience, behaviour economics, developmental and social neuroscience, and clinical neuroscience. He is particularly interested in uncovering the neural underpinnings of social decision-making, empathy, morality, prosocial behaviour, and social preferences. Dr Decety has written countless empirical and theoretical papers and has presented his work at conferences worldwide. Over his career, he has received many honours and awards, including the 22nd Jean-Louis Signoret Neuropsychology Prize of the Foundation Ipsen in Paris. Dr Decety was elected as a member of Academia Europaea – pan-European Academy of Humanities, Letters, Law, and Sciences, in 2022.



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## FURTHER READING

KJ Yoder, J Decety, [Moral conviction and metacognitive ability shape multiple stages of information processing during social decision-making](#), *Cortex*, 2022, 151, 162–175. DOI: <https://doi.org/10.1016/j.cortex.2022.03.008>

CI Workman, KJ Yoder, J Decety, [The Dark Side of Morality – Neural Mechanisms Underpinning Moral Convictions and Support for Violence](#), *AJOB Neuroscience*. 2020, 11(4), 269–284. DOI: <https://doi.org/10.1080/21507740.2020.1811798>