Moral Science: Cognitive Architecture and Moral Disagreement

Research with sacrificial moral dilemmas (kill one to save many) provides an experimental window into how two plausibly fundamental moral principles – namely the utilitarian "Promote the greater good" and the deontological "Protect individual rights" – interact and potentially lead to radical moral disagreement. These principles do not always conflict, but when they do, research shows that participants disagree in their judgments; some approve the sacrifice of one life (a rights-infringement) to save more, while others uphold the protection of individual rights. The mainstream view (Greene & collaborators) interprets the disagreement as a function of whether participants are able or not to rationally inhibit ancestral, prepotent, emotional impulses, typically activated when the sacrifice is "close up and personal", rather than impersonal. This allows them to fend off disagreement by endorsing the normative superiority of the utilitarian, more rational, solution.

However, data from several published studies reveal that different personal scenarios can evoke a wide range of percentages of approval, from 25% to 75%. This wide range across different personal items cannot be explained by variance in the ability to control aversive emotions, because it is observed within the same experimental samples. Rather, the items suggest differences in the severity of the rights-violation (victim innocent or not, or doomed to die anyway), even though it is personal in all scenarios. This suggests that participants confront dilemmas primarily by estimating a balance of moral costs vs. moral benefits. The varying moral cost of sacrificing one person is objective, but it is met with individual variation in the relative force of the moral sensitivities (utilitarian vs. deontological). If it is unlikely to place this subjective factor under a normative rule, e.g., by establishing the superiority of one particular balance between the conflicting sensitivities, then the resulting disagreement is probably radical.

Bibliographic references

Greene, J. D., Morelli, S. A., Lowenberg, K., Nystrom, L. E., & Cohen, J. D. (2008). Cognitive load selectively interferes with utilitarian moral judgment. Cognition, 107, 1144–1154.

Greene, J.D., Nystrom, L. E., Engell, A.D., Darley, J. M., & Cohen, J.D. (2004). The neural bases of cognitive conflict and control in moral judgment. Neuron, 44, 389–400.

Greene, J. D., Sommerville, R. B., Nystrom, L. E., Darley, J. M., & Cohen, J. D. (2001). An fMRI investigation of emotional engagement in moral judgment. Science, 293, 2105–2108.

Nelkin, D. K.,McKenzie, C. R.M., Rickless, S. C., & Ryazanov, A. A. (in press). Trolley problems reimagined: Sensitivity to ratio, risk, and comparisons. In: F. Aguiar, H. Viciana, & A. Gaitan (Eds.), Experiments in moral and political philosophy, Routledge (forthcoming).

Rosas, A., Bermúdez, J. P., & Aguilar-Pardo, D. (2019). Decision conflict drives reaction times and utilitarian responses in sacrificial dilemmas. Judgment and Decision Making, 14(5), 555–564.

Rosas, A., & Aguilar-Pardo, D. (2020). Extreme time-pressure reveals utilitarian intuitions in sacrificial dilemmas, Thinking and Reasoning, 26(4): 534-551.

Rosas, A., Hannikainen, I., Lam, J., & Aguiar, F. (2023). Individual attitudes towards moral costs and benefits drive responses to moral dilemmas. European Journal of Social Psychology, 1–13. Advanced Online Publication. https://doi.org/10.1002/ejsp.2935