



DOI:10.29013/EJHSS-24-5-35-38



BIOLOGY AND CULTURE: EVALUATING THE RELIABILITY OF MORAL INTUITIONS THROUGH UTILITARIAN ETHICS

*Ziyan Huang*¹

¹ The Winsor School, USA

Cite: Ziyan Huang. (2024). *Biology and Culture: Evaluating the Reliability of Moral Intuitions Through Utilitarian Ethics*. *European Journal of Humanities and Social Sciences* 2024, No 5. <https://doi.org/10.29013/EJHSS-24-5-35-38>

Abstract

This paper explores the reliability of moral intuitions through the lens of utilitarian ethics, examining both their biological and cultural underpinnings. It argues that while human moral intuitions have a biological basis that aligns with utilitarian principles, these intuitions are significantly influenced and often altered by cultural and societal norms. The first section discusses the biological foundations of moral intuitions, highlighting research on genetic predispositions and neurological factors that support fairness and cooperation as fundamental moral principles. The second section examines how socialization and cultural exposure shape and sometimes distort these intuitions, leading to ethical practices that may diverge from utilitarian standards. Case studies, including the practice of ritual cannibalism, illustrate the conflict between innate moral responses and culturally derived values. The paper concludes that while biological intuitions provide a fundamental ethical framework, the influence of cultural norms necessitates a critical evaluation of moral beliefs to ensure alignment with utilitarian ethics. This underscores the importance of not solely relying on intuitions shaped by cultural contexts but rather assessing them against objective ethical standards.

Keywords: *moral intuition, utilitarianism, neurological foundation, implicit learning, moral relativism*

Introduction

Is it acceptable to eat other human beings? Your instinct to a problem like that is what scholars call moral intuition. Intuition is defined as “a form of knowledge that appears in consciousness without obvious deliberation” (Psychology Today). At birth, humans are born with a set of intuitions that help us live in a communal setting given our nature as social animals. In addition to those funda-

mental intuitions, humans continue to develop their intuitive toolbox as they learn from their experiences and go through the process of socialization. With all that being said, do we have any good reasons to trust our moral intuitions?

The definition of morality is an ongoing debate between philosophers. This paper takes on the utilitarian approach, in which the 19th century English philosopher John Stuart Mill defined moral behaviors as those

that maximize benefits to the greatest number of people (Mill, 1879). Thus, this paper will evaluate the morality of human intuition based on the principle of utility. While our basic biological intuitions follow a moral consensus, the moral intuitions we gain from our society cannot be fully trusted as cultures may follow moral standards that go against the principle of utility.

Biological Intuitions

Modern science shows that the makeup of the human brain and neurological hormones provide humans with moral intuitions that benefit the group and in turn help us live in a social setting. In a study exploring the neural basis of intuitions relating to fairness, researchers established that “genetic factors moderately contributed to unfairness-evoked activation in the bilateral anterior insula (AI), regions representing the intuition of fairness norm violations (mean heritability: left 37%, right 40%)” (Wang et al, 2019). These findings demonstrate that the area in our brain responsible for reacting to issues concerning fairness is 37% and 40% determined by our genes on the left and right sides of our brain respectively. As previously defined, moral behavior is one that brings the most benefits to the greatest number of people. Thus, fairness, which ensures that everyone is treated in the same way, is an element of morality (Haidt and Joseph, 2006). The fact that our repulsion towards “unfair proposals” is programmed in our genes means that no reasoning is needed to form such a reaction, showing that humans possess moral intuitions that follow the principle of utility at a fundamental level.

The hormones of the human brain’s neurological network also compel humans to behave morally. Patricia S. Churchland, a neuro-philosopher, writes, “By and large, humans...are strongly motivated to be with group members and to share in their practices” (Churchland 2011, pg. 8). This motivation to be part of a group manifests as the happy feelings that the human neural-system releases when the individual is among other humans. For example, oxytocin (OXT) is a “feel-good” hormone that encourages individuals to be more sociable and is released when a person is with their kin (Churchland,

2011). In an experiment testing whether intranasal oxytocin increases cooperation within males, participants were split into two groups and could make three choices with the 10 euros they were given: keep the money for themselves, give it to their group, or give it to their group while taking additional money from the another group. The researchers found that “the men who got the intranasal OXT treatment were significantly more cooperative”, with only 17 percent keeping the money for themselves compared to the 52 percent in the group untreated with OXT (Churchland, 2001, pg. 75). Since oxytocin encourages cooperation and allows benefits to be shared among the group, this experiment provides further evidence that humans have moral intuitions encoded in their biological makeup.

Given that fairness and group cooperation produce benefits for the group and therefore maximize utility, the two studies above prove that our basic biological intuitions are moral; however, these intuitions do not account for a person’s complete ethical perspective. Churchland notes that “the platform is only the platform; it is not the whole story of human moral values,” indicating that the moral intuitions gained from our biological programming only lay the foundations for our ethical beliefs and thus cannot represent the trustworthiness of all of our moral intuitions.

Socialization

In addition to our biological intuitions, humans obtain new intuitions by absorbing the norms of their societies and cultures. Churchland credits the human reward-punishment system for this phenomenon where humans are driven “to learn social practices” (Churchland, 2011, pg. 16). To obtain the positive feelings that arise from being accepted in a community, humans unconsciously adopt societal norms through a process known as implicit learning (Woodward and Allman, 2007). Implicit learning starts from a young age, where humans observe and absorb information about their culture until the knowledge is incorporated into their intuitions. As opposed to explicit learning, humans undergo this process without being consciously aware. An example of im-

PLICIT learning was shown in an experiment in which American students were exposed to media coverage of the 2015 Paris attacks by Muslim terrorists. Through a series of methods developed to measure change in the intuitions of the participants, the researchers found that participants developed a more prominent authority intuition, defined as the “respect for and deference to traditions and hierarchies” (Tambourini et al., 2007, pg. 4). The increased salience of authority intuition, another element of morality defined by Haidt and Joseph (2011), led to “increases... [in] preferential treatment of ingroup over outgroup members” (Tambourini et al., 2007, pg. 8) and greater prejudice towards outgroups, in this case, Muslims (Tambourini et al., 2007). Just through consuming media, a component of culture, the moral intuitions of the participants were modified to hold prejudice towards the Muslims. Thus, this passive observation of cultural elements leads to implicit learning and impacts our moral intuitions. Furthermore, in an experiment in which participants were shown images of African Americans widely known to be positive figures, the participants “showed a significant reduction in implicit negative attitudes toward African Americans” (Dasgupta & Greenwald, 2001; Pizarro and Bloom, 2001, pg. 194). As such, the study shows that people’s views on race, a social construct, are dependent on their exposure to other races within their own society. By exposing participants to African Americans exemplars, participants were able to change the ways they “implicit[ly]” thought of African Americans. Such a change in perspective is equivalent to an alteration of the participants’ moral intuitions through implicit learning. As these studies show, our intuitions are constantly undergoing modifications as a result of our cultural experiences.

As opposed to biological moral intuitions, which are largely shared by humans at birth, cultures around the world have differing and often contrary moral values. For example, while marriage is exclusive to two persons in the United States, polygamy is commonly found in sub-Saharan African countries (Kramer, 2020). This makes it impossible for everyone to possess moral intu-

itions that align with the principle of utility, the concept of maximizing benefits for the greatest number of people. Because the diversity of cultural beliefs produces practices that cannot all be morally valid, our moral intuitions that are shaped by societal and cultural norms cannot be trusted. As individuals who grow up in an environment adopt the ethical standards of that culture, they can develop moral intuitions that discriminate against specific populations. For example, conservative religions that do not view women as equal do not hold intuitions that are moral based on utilitarian standards as such practices repress and discriminate against half of the world’s population. Immoral cultural values also occur when an in-group that is smaller than the out-group holds prejudicial beliefs against the out-group. In a case like this, the in-group’s beliefs about what is beneficial may not be what is beneficial for humanity as a whole. For instance, white supremacists believe that they are superior to other races and advocate for laws or reforms that benefit whites at the cost of all other races. Since white supremacists are a small population compared to the populations they want to suppress, individuals who grew up and adopted the beliefs of a white supremacist environment are not moral by the utilitarian definition. Thus, as one’s moral intuitions can be shaped by immoral culture standards, they should not be blindly trusted.

Conclusion

While genetics and neurological systems have encoded moral intuitions that allow humans to be part of a society, more advanced moral intuitions that are learned from an individual’s culture may not always consider everyone’s benefits. When readers first encountered the idea of cannibalism mentioned above, many may have been repulsed by the thought; however, this practice exemplifies the conflict between biological and social intuitions. For most people, their biological moral intuitions tell them that cannibalism is wrong; however, specific societies have developed cultural beliefs that promote “ritual cannibalism,” oftentimes as a funeral procedure. The Fore tribe in Papua New Guinea, for example, eat their dead loved ones so that they

hold a piece of them inside themselves forever (Tikkanen, 2019). Given that rituals are purely constructed through cultural processes, acceptance of cannibalism is an example of culturally derived moral intuition. While this example of ritual cannibalism is not im-

moral by utilitarian standards, it illustrates how humans can overwrite their biological moral intuitions. When one's socially learned intuitions override their biological ones, their morals may no longer be moral; thus we as humans cannot trust our moral intuitions.

Works Cited

- Churchland, P.S. (2011). *Braintrust: What neuroscience tells us about morality*. Princeton University Press.
- Dasgupta, N., & Greenwald, A. (2001). On the Malleability of Automatic Attitudes: Combating Automatic Prejudice With Images of Admired and Disliked Individuals. *Journal of Personality and Social Psychology*, – 81(5).– P. 800–14. URL: <https://doi.org/10.1037//0022-3514.81.5.800>.
- Gregory, S., Ffytche, D., Simmons, A., Kumari, V., Howard, M., Hodgins, S., Blackwood, N. (2012). “The Antisocial Brain: Psychopathy Matters: a Structural MRI Investigation of Antisocial Male Violent Offenders”. *Archives of General Psychiatry*, – 69(9).– P. 962–972. URL: <https://doi.org/10.1001/archgenpsychiatry.2012.222>
- Haidt, J., & Joseph, C. (2006, December 21). “The Moral Mind: How five sets of innate intuitions guide the development of many culture-specific virtues, and perhaps even modules”. In P. Carruthers, S. Laurence, and S. Stich, *The Innate Mind*, – 3,– P. 367–391.
- Kramer, S. (2020, December 7). *Polygamy is Rare Around the World and Mostly Confined to a Few Regions*. Pew Research Center. URL: <https://www.pewresearch.org/short-reads/2020/12/07/polygamy-is-rare-around-the-world-and-mostly-confined-to-a-few-regions>
- Mill, J.S. (1879). *Utilitarianism* (7th Edition). Longmans, Green and CO.
- Pizarro, D.A., & Bloom, P. (2001). “The Intelligence of the Moral Intuitions: Comment on Haidt”. *Psychological Review*, – 110(1).– P. 193–196. URL: <https://doi.org/10.1037/0033-295X.110.1.193>
- Psychology Today. *Intuition*. URL: <https://www.psychologytoday.com/us/basics/intuition>
- Tamborini, R., Hofer, M., Prabhu, S., Grall, C., Novotny, E.R., Hahn, L., Klebig, B. (2017). “The Impact of Terrorist Attack News on Moral Intuitions and Outgroup Prejudice”. *Mass Communication and Society*, – 20(6).– P. 800–824. URL: <https://doi.org/10.1080/15205436.2017.1342130>
- Tikkanen, A. (2019, June 28). Cannibalism: Cultures, Cures, Cuisine, and Calories. *Encyclopedia Britannica*. URL: <https://www.britannica.com/story/cannibalism-cultures-cures-cuisine-and-calories>
- Wang, Y., Zheng, D., Chen, J., Rao, L., Li, S., Zhou, Y. (2019). “Born for Fairness: evidence of genetic contribution to a neural basis of fairness intuition”. *Social Cognitive and Affective Neuroscience*, – 14(5).– P. 539–548. URL: <https://doi.org/10.1093/scan/nsz031>
- Woodward, J., & Allman, J. (2007). “Moral Intuition: Its neural substrates and normative significance”. *Journal of Physiology Paris*, – 101(4–6).– P. 179–202. URL: <https://doi.org/10.1016/j.jphysparis.2007.12.003>

submitted 30.07.2024;

accepted for publication 14.08.2024;

published 28.10.2024

© Ziyang Huang

Contact: shuanzgy07@gmail.com