Abstract

In this dissertation, we delve into the multifaceted domains of biological and social factors influencing human morality. The connecting element of this collection of four studies is both an interest in human morality as a traditional philosophical topic and the use of methods from empirical sciences, particularly biology, behavioural, and cognitive sciences.

The first study focuses on the moral algorithms in autonomous vehicles. We examined moral preferences regarding the choice between software types that differ in their built-in algorithms for dealing with lethal collisions. These are categorized into three specific types: selfish, altruistic, and conservative. Respondents exhibited a preference for the altruistic strategy, which is reinforced when signalled to others. The altruistic preference is the most pronounced when it applies to everybody else, weaker when it reflects only a personal choice, and the weakest when choosing for one's own child. We conclude that making a choice public significantly sways individuals towards a more socially beneficial solution.

The second study investigates the relationship between parasite *Toxoplasma gondii* infection and its subsequent impact on human political beliefs and values. Infected participants exhibited a tendency towards heightened tribalism and lowered cultural liberalism and anti-authoritarianism. Controlling for the effects of worse physical and mental health had little impact, suggesting that impaired health did not cause these changes. Rather than an adaptation to prevalence of parasites, as suggested by parasite-stress theory, the differences might be side-effects of a long-term mild stress.

The third study focuses on the Czech population, elucidating the interplay between religious beliefs and various facets of well-being in a mostly atheist country. In contrast to previous studies, we found a negative correlation between religiosity and both physical and mental health. A connection emerged between increased religiosity and heightened self-rated altruism, biological fitness, and decreased sexual activity.

Lastly, in the fourth study, we explored children's conceptualizations of personal identity within a developmental framework, testing the concept of essential moral self. Through hypothetical scenarios of change, we were able to show that moral traits, especially those linked to interpersonal relationships, were crucial for preserving personal identity. Moreover, negative changes in these traits had a more pronounced detrimental impact on identity than their positive counterparts.

In this endeavor towards multidisciplinarity and bridging of disciplines, we enriched one scientific discipline with the methodology of another, addressing human morality from diverse perspectives.