

Basic Properties of Ethics

Subjects: **Ethics**

Contributor: Sarah Isufi , Kristijan Poje , Igor Vukobratovic , Mario Brcic

Ethics is a discipline concerned with good and bad moral values and norms that can be right and wrong. Norms define standards of acceptable behavior by groups. Specific ethical systems, through their norms (computable conventions), constrain and partially solve the problem of life. The importance of ethics for society is paramount, as no social group can stay cohesive and in existence if there are no constraints on the behavior of individuals. For example, frequent, reasonless escalations and attacks with killing or injuring others would dissolve any group. Hence, the problem that ethics tries to solve is improving group performance in a setting that is multi-criteria, dynamic, and poised by uncertainties. It operates on a large societal scale, making for a complex setting in which adaptability is crucial. Ethics emerged collaterally through cultural evolution on a longer time scale where all changes have been slow and gradual.

ethics

moral innovation

1. Main Purpose of Ethics

The researchers argue that the primary purpose of ethics is achieving better group performance. Coordination is an essential aspect of ethics since it makes collectives more progressive under the cap of available resources to bring about a better outcome for the group. Cooperative societies with a clear division of labor progressed faster because the members were united under the same goal ^{[1][2]}.

The cost-effectiveness of cooperation at all stages of social development is an essential item and a prerequisite for determining posterior ethics and moral rules. Despite the complexity of moral imperatives in the past and present ethics, many have a visible discourse about cooperation within the community. From the slave-owning societies of Greece to South America, from monarchies to republics, there is a rule of respect and cooperation with one's equals. The difference is in the definition of equality and which social, age and class groups fall into that definition, and which are outside it. Thus, cooperation is a plausible precondition for the emergence of ethics per se, no matter how it developed later, whether it included a larger or smaller group of people, the whole community, or just a selected few. The advancements of societies are a by-product of individual satisfaction, which comes from social evolution. To maximize social evolution, the freedom of individuals is required because only then the selection process has enough variability to maximize social fitness. Consequently, the freedom and struggle for survival yield altruism which, next to cooperation, serves as the backbone of every prosperous society ^[3].

The selection process is the main reason for increased altruism in society, illustrated in the following example. Parents who are not altruistic toward their children will have children with a lower survival rate. Over time, the

altruistic population will increase, and individuals without those traits will decrease in the number ^[4]. This kin-based altruism ^[3] has a limited range of effects. Another mechanism for cooperation is reciprocity which appears in repeated interactions ^[5]. It somewhat increases the range of effects but is sustainable in dyads and tends to collapse in larger groups ^{[6][7]}. Kin-based altruism and long-term interactions are mechanisms through which natural selection on genes can produce cooperation ^[8]. However, they are insufficient to explain humans' high level of cooperation. Cultural products such as social norms and institutions maintained by mechanisms related to reputation, signaling, and punishment form longer-term cooperations within much larger groups and under a broader range of conditions ^{[6][9]}.

2. Ethical Dynamics

It has already been mentioned how normative ethics emerges due to social dynamics and cultural trade-offs. Simply put, ethics limits the abilities of person A, so that person A cannot harm person B and vice versa. The trade-off is the willing acceptance of a restriction of action to increase welfare for all the factors involved and the general social structure. Therefore, this makes ethics prone to change with changing social standards and ultimately uncertain.

The basis of the claim is the existence of a social consensus on whether a rule will be accepted or not ^[10]. It is evident that ethics is not static, but it changes dynamically in response to environmental changes. One needs not look too far into the past to see remarkable changes in moral systems during the 20th century ^[11]. Today's growing technological innovation puts people in new situations that need new societal wisdom, for example, artificial intelligence, globalization, the rise of multinationals, and the metaverse.

The nature of human morality is confined to norms and conventions ^[12] describing the individual's behavior and posed rules to regulate individuals and groups. However, society's degree to which individual differences are permitted is variable. The tolerance of society to the variability of individual diversity is crucial to maintaining a biological system that adapts to changes in the environment and throughout time. In general, the rules defining the morality of humans have evolved to transmit genes to succeeding generations. Various beliefs and behaviors have been developed to support this goal during various historical accidents, climate changes, and different structures of the gene pools ^[13].

Another essential aspect of the evolution of morals is that cultural bias and human values are not genetically predetermined, i.e., humans have multiple behavioral potentials. Despite inherited predispositions, humans have the emotional and cognitive abilities to be selfish and cooperative. Different circumstances and societies cause individuals to find their moral trajectory ^[14]. Cultural evolution is another driver of the development of human culture. Humans share information via language and media (e.g., music, writings) that enables the distribution of information and resources, thus providing mechanisms for cultural evolution. Another property of humans accelerating cultural evolution by freeing cultural information from conceptual limits is metarepresentation, i.e., thinking about how we think ^[15]. Unlike genetic evolution causing slow changes in societal culture, cultural evolution has a substantially faster rate ^[16].

3. Multicriteriality of The Setting

Utility theory, which is based on improving a single objective, has been criticized in economics due to the apparent incommensurability of options in reality ^[17]. Brcic and Yampolskiy ^[18] hypothesize that human decision-making is made in multicriterial space where the mood selects a subset of focal criteria. These focal criteria are heuristically optimized as near as possible to the Pareto front. Non-focal criteria are simultaneously kept within acceptable bounds. When there are multiagent interactions, we enter the multicriterial aspects of ethics, which tend to create ethical dilemmas. The trade-offs can be between the essential drives within an individual or between the benefits of the individual and society. These dilemmas cannot be elegantly resolved. The researchers argue that this can be connected to the property that there are many competing criteria on which ethical decisions must be based, as well as decisions in which games to take part at a specific moment. The trolley problem ^[19] is one such problem where the criteria of “do no harm” and “reduce suffering” play against each other and cannot flatly be resolved without being wrong against some criteria. Ethical dilemmas constrain the achievement of perfect outcomes, so it is often impossible to respect multiple criteria simultaneously. This means inevitable trade-offs, defined in, e.g., fairness ^[20] and Social Choice Theory (SCT) ^[21], must be made where we choose the solution that achieves the maximal possible hypervolume indicator ^[18].

Consequentialist ethics is prone to dilemmas originating from multicriteriality whereby several criteria must be traded off in a consequential state. Deontological ethics can use norms to dissolve complicated, commonly occurring dilemmas into more specific coordination problems ^[22]. However, such systems introduce dilemmas through inconsistencies.

4. Status of Uncertainty in Ethics

Ethical behavior is, first and foremost practical activity. Namely, epistemological limits (information and cognition) are not held against actors in the case of mistakes and bad outcomes; instead, they are used for discounting responsibility. Actors often do not possess sufficient information or necessary cognition to achieve omniscient and omnipotent (and yet, still subject to some limits) solutions. Courts recognize the same principle in most legal systems. For example, a person with temporary or permanent reduced cognitive ability will receive a more lenient sentence. The primary motivation behind this act is that mental impairment caused by mental illness or substance use diminishes the mental capacity to make rational decisions ^[23].

Another example of ethical uncertainty is caused by insufficient information. Hindsight bias indicates that human post-fact decisions are likely to be affected by knowing the outcome of their actions. This means humans will reconstruct the entire thinking process leading them to an initial decision when they hear the outcome and change their final decision accordingly ^[24]. Hindsight is discounted from responsibility. For this reason, if a surgeon, for example, misinterprets a patient’s diagnosis due to latent factors leading a patient to death, he will not be prosecuted. Had he known the actual diagnosis, he would have taken different actions.

5. Collateral Nature

There are universal moral rules, but there is no unified ethics ^[25] as there is a lot of variation between different moral systems in human culture ^[26]. Ethics has always awaited us; it was a forward handoff from a continuous stream of generations to their posterity. As the COVID-19 pandemic has demonstrated, new situations call for new solutions. Since new situations, especially significant ones, are inherently random, ethics has so far emerged collaterally, i.e., under no guidance by some human designer. Societies adjust ethics to technical progress, social conditions, and cultural standards. The question is: Can ethics that does not arise collaterally even be created? Can there be a system for predicting ethics or the best possible moral course for society?

When considering the origin of ethics, the researchers argue that it has emerged collaterally but not randomly. Instead, several factors have influenced the development of ethics, including the neurobiological characteristics of each individual and the sociocultural environment in which the individual develops. Moreover, the essential elements determining the development of moral judgment and consequently functioning when resolving dilemmas are derived from cultural characteristics, spirituality, socioeconomic environment, life experiences, and correct neurological functioning ^[27].

Darwin's view on moral theory is based on conscience, i.e., social instinct. A social instinct is how an individual behaves in a group for that group's benefit. Individual behavior will result from adopted human values, influencing every decision that has consequences for the group. Consequently, the social instinct results from the group's evolution, increasing group fitness. Unlike other social animals, humans have developed intellect that allows reasoning when faced with dilemmas. However, such reasoning is inevitably constrained by social instinct and human values ^[28].

References

1. Becker, G.S.; Murphy, K.M. The Division of Labor, Coordination Costs, and Knowledge. *Q. J. Econ.* 1992, 107, 1137–1160.
2. Ricardo, D. *On the Principles of Political Economy and Taxation*; Liberty Fund, Inc.: Indianapolis, IN, USA, 2004; ISBN 978-0865979659.
3. Dawkins, R. *The Selfish Gene*; Oxford University Press: New York, NY, USA, 1976; ISBN 978-0-19-857519-1.
4. Thompson, P. Evolutionary Ethics: Its Origin and Contemporary Face. *Zygon*® 1999, 34, 473–484.
5. Axelrod, R.M. *The Evolution of Cooperation*; Basic Books, Inc.: New York, NY, USA, 1984; ISBN 978-0-465-00564-2.

6. Henrich, J.; Muthukrishna, M. The Origins and Psychology of Human Cooperation. *Annu. Rev. Psychol.* 2021, 72, 207–240.
7. Boyd, R.; Richerson, P.J. *Culture and the Evolutionary Process*; University of Chicago Press: Chicago, IL, USA, 1988; ISBN 978-0-226-06933-3.
8. Lehmann, L.; Keller, L. Synergy, Partner Choice and Frequency Dependence: Their Integration into Inclusive Fitness Theory and Their Interpretation in Terms of Direct and Indirect Fitness Effects. *J. Evol. Biol.* 2006, 19, 1426–1436.
9. Wu, S.A.; Wang, R.E.; Evans, J.A.; Tenenbaum, J.B.; Parkes, D.C.; Kleiman-Weiner, M. Too Many Cooks: Bayesian Inference for Coordinating Multi-Agent Collaboration. *Top. Cogn. Sci.* 2021, 13, 414–432.
10. Assaad, L. The Structural Evolution of Cooperation: Can Evolutionary Game Theory Teach Us About Morality? *Rerum Causae* 2021, 12.
11. Wheeler, M.A.; McGrath, M.J.; Haslam, N. Twentieth Century Morality: The Rise and Fall of Moral Concepts from 1900 to 2007. *PLoS ONE* 2019, 14, e0212267.
12. Lewis, D. *Convention: A Philosophical Study*; John Wiley & Sons: Hoboken, NJ, USA, 1969; ISBN 978-0-470-69296-7.
13. Petrinovich, L.F. *Human Evolution, Reproduction, and Morality*; MIT Press: Cambridge, MA, USA, 1998; ISBN 978-0-262-66143-0.
14. Allchin, D. The Evolution of Morality. *Evol. Educ. Outreach* 2009, 2, 590–601.
15. Distin, K. *Cultural Evolution*; Cambridge University Press: Cambridge, UK, 2011; ISBN 978-0-521-18971-2.
16. Diamond, J.; Renfrew, C. *Guns, Germs, and Steel: The Fates of Human Societies*. *Nature* 1997, 386, 339.
17. Broome, J. *Ethics out of Economics*; Cambridge University Press: Cambridge, UK, 1999; ISBN 978-0-521-64275-0.
18. Brcic, M.; Yampolskiy, R.V. Impossibility Results in AI: A Survey. *arXiv* 2021, preprint. arXiv:2109.00484.
19. Foot, P. The Problem of Abortion and the Doctrine of the Double Effect. *Oxf. Rev.* 1967, 5, 5–15.
20. Kleinberg, J.; Mullainathan, S.; Raghavan, M. Inherent Trade-Offs in the Fair Determination of Risk Scores. *arXiv* 2016, preprint. arXiv:1609.05807.
21. Arrow, K.J. A Difficulty in the Concept of Social Welfare. *J. Polit. Econ.* 1950, 58, 328–346.
22. Bicchieri, C. *The Grammar of Society: The Nature and Dynamics of Social Norms*; Cambridge University Press: Cambridge, UK, 2005; ISBN 978-0-521-57372-6.

23. Bernard, K.N.; Gibson, M.L. Professional Misconduct by Mentally Impaired Attorneys: Is There a Better Way to Treat an Old Problem Current Developments 2003–2004. *Georget. J. Leg. Ethics* 2003, 17, 619–636.
24. Sligo, F.; Stirton, N. Does Hindsight Bias Change Perceptions of Business Ethics? *J. Bus. Ethics* 1998, 17, 111–124.
25. Kinnier, R.T.; Kernes, J.L.; Dautheribes, T.M. A Short List of Universal Moral Values. *Couns. Values* 2000, 45, 4–16.
26. Awad, E.; Dsouza, S.; Shariff, A.; Rahwan, I.; Bonnefon, J.-F. Universals and Variations in Moral Decisions Made in 42 Countries by 70,000 Participants. *Proc. Natl. Acad. Sci. USA* 2020, 17, 2332–2337.
27. Hanun Rodríguez, O.; Ximénez Camilli, C. The Neurobiological and Environmental Origin of Ethics: Analysis of Biological, Social and Religious Determinism. *Bioeth. Update* 2018, 4, 92–102.
28. Darwin, C. *The Descent of Man, and Selection in Relation to Sex*; Princeton University Press: Princeton, NJ, USA, 2008; ISBN 978-1-4008-2006-1.

Retrieved from <https://encyclopedia.pub/entry/history/show/83542>