

Reflections on Morality-as-cooperation Theory: Curry's Interpretation of Morality, Evolutionary Ethics, and Consequentialism

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Abstract. Morality-as-cooperation theory is an evolutionary moral theory that emphasizes the influence of individual thinking and character on moral behavior. It suggests that morality is shaped by cognitive abilities, social norms, and cultural values, with individuals motivated by both their interests and the welfare of others. Character plays a crucial role in providing consistency and stability in moral actions. However, the theory inherits flaws from evolutionary ethics and consequentialism, leading to the naturalistic fallacy. This theory fails to distinguish between natural facts and moral values, overlooking normative morality. It lacks attention to moral values and normativity, essential aspects of any moral theory. Additionally, its consequentialist character equates cooperation with moral normality, ignoring the distinction between morally "good" and "bad" cooperation. To address these shortcomings, it should explore the moral values behind cooperative behaviors and differentiate descriptive and normative morality. It should consider culture, beliefs, and rationality as vital factors in moral development, along with evolutionary processes. Avoiding the naturalistic fallacy requires analyzing the moral nature of cooperation and its various consequences. The theory offers valuable insights into moral behavior formation, considering individual thinking and character alongside external influences.

Keywords: Morality, Evolutionary Ethics, Consequentialism, naturalistic.

1. Introduction

In Morality-as-cooperation theory (MAC), the formation of moral behavior is influenced by factors such as an individual's cognitive abilities, social norms, and cultural values. Individuals consider their interests in moral behavior while also valuing the rights and interests of others and social justice [1]. The MAC theory views moral behavior as a dynamic process that is constantly changing and evolving. The individual's character traits and the external environment interact to shape the individual's moral behavior. Individuals' actions are concrete manifestations of moral behavior and are guided by moral cognition and judgment. At the same time, an individual's actions in turn influence and shape his or her character. Individuals' actions are not only derived from their moral codes but are also influenced by social and cultural influences, as well as evaluations and expectations of the behavior of others. For example, a person may perform good deeds and help others because they possess character traits such as caring for others, empathy, and philanthropy. Character is seen as central to an individual's moral behavior in MAC theory. Character is an individual's intrinsic drive for moral norms and values and is the basis for consistency and stability in moral behavior. Good character enables individuals to adhere to moral behavior and remain consistent across situations, overcome temptations and difficulties, and be able to influence the behavior of others.

As mentioned above, the evolutionary nature of moral behavior is emphasized. It argues that moral behavior is a product of the progress of human society and the development of civilization [1]. As society evolves, people develop consensus and values about moral behavior, and these moral codes and norms drive and guide individual actions and character development. Through socialization and education, people gradually accept and internalize these shared moral standards, and continuously strengthen and improve them in practice. In practical application, MAC theory is an important guide

for moral education and moral development. It reminds us to pay attention to the cultivation of individual character and moral consciousness. Emphasis is placed on cultivating the individual's ability to make moral judgments, sense of moral responsibility, and autonomy of moral choice, while attention is paid to the individual's expression of emotions and the handling of moral conflicts. Through the influence of education and social environment, people can be helped to form positive moral behavior patterns and good character traits.

MAC theory does provide an important framework for understanding the formation of moral behavior. Factors such as an individual's cognitive abilities, social norms, and cultural values are considered to be among the influences on moral behavior. Individuals not only consider their interests in moral behavior but also value the rights and interests of others and the justice of society, which is the social and public nature emphasized in MAC theory. Individuals' actions are considered as concrete manifestations of moral behavior and are also guided by the individual's moral perceptions and judgments. It likewise emphasizes the central role of character in moral behavior. Character is the individual's intrinsic drive for moral norms and values and is the basis for consistency and stability in moral behavior. Good character enables individuals to adhere to moral behavior and be consistent across situations and influence the behavior of others. The cultivation and development of character can be achieved through education and the influence of the social environment.

2. Recap of MAC values

The formation and demonstration of moral behavior is a product of human social progress and civilization development. As society evolves, people form consensus and values about moral behavior and gradually accept and internalize these shared moral standards through socialization and education. Therefore, it reminds us to pay attention to the cultivation of individual character and moral consciousness in moral education and moral development, and to the individual's ability to make moral judgments, sense of moral responsibility, and autonomy of moral choice.

All in all, MAC theory is a kind of moral evolutionary theory that emphasizes the influence of individual thinking and character on moral behavior. It reveals the mechanisms by which moral behavior is formed and displayed by examining the relationship between action and character. In addition, continued research needs to consider cross-cultural and cross-group comparisons. There may be differences in perceptions and values of ethical behavior across cultures and groups, and how these differences shape individuals' ethical behavior needs to be further researched and explored.

Prospectively, future research could further explore the mechanisms by which an individual's internal character traits and external environment influence moral behavior. Through psychological experiments, follow-up studies, and social observations, researchers can gain insights into individuals' cognitive processing of moral issues and conflicts, the process of moral decision-making, and how moral awareness and moral behavior are cultivated and developed. Future moral education can also design more effective curricula and practical activities based on the guidance of MAC theory. From kindergarten to adult education, individuals can be cultivated in their ability to make moral judgments, their sense of moral responsibility, and their autonomy in making moral choices, while focusing on their expression of emotions and their processing of moral conflicts. By fostering comprehensive moral literacy, it promotes more positive and responsible moral behavior in the individual's daily life.

In the future, MAC theory can provide more in-depth guidance for moral education and moral development. By examining the mechanisms by which an individual's internal character traits and external environment influence moral behavior, we can better understand the cognitive processing of moral issues and conflicts, the process of moral decision-making, and how to cultivate and develop moral awareness and moral behavior. This will help to design more effective moral education curricula and practical activities from kindergarten to adult education to improve morality in society by fostering individuals' ability to make moral judgments, their sense of moral responsibility, and their autonomy in making moral choices. It is also important to pay attention to the expression of emotions and the handling of moral conflicts in individuals, which will help them to exhibit more

positive and responsible moral behavior in their daily lives. Therefore, moral education in the future can promote the comprehensive moral qualities of individuals and further promote the moral progress and civilization of society.

3. The consequentialist character of MAC as a theory of moral evolution

Moral theories provide frameworks for understanding and justifying ethical principles and actions. Within consequentialist theories, moral cooperation theory stands out as a comprehensive approach that considers cooperation as the key to moral evolution. Consequentialism is a theory that says whether something is good or bad depends on its outcomes. Utilitarianism, a branch of consequentialism, holds that the moral value of an action is determined by its ability to maximize overall utility or happiness. Throughout the history of philosophy, utilitarianism has undergone a development in its emphasis on either the collective or the individual perspective. Jeremy Bentham's early utilitarianism laid the foundation for a collective approach, emphasizing the maximization of overall happiness for the greatest number in society, possibly overlooking individual minorities. In response to some of its limitations, John Stuart Mill introduced an individualistic shift by considering qualitative distinctions in pleasure and valuing intellectual and moral well-being over mere physical pleasure [2]. As time goes on, the emergence of rule utilitarianism renewed the focus on the collective dimension. This approach proposed following general rules that would lead to the greatest overall happiness for society. On the other hand, act utilitarianism redirected attention to the individual in moral decision-making, evaluating each action based on its specific consequences and impact on individual well-being. After that, preference utilitarianism offered a way to balance the collective and the individual by focusing on satisfying individual preferences rather than strictly maximizing overall happiness. This approach recognized the importance of individual agency while still considering the collective satisfaction of preferences. Utilitarianism's evolution has shown a progression from a collective emphasis to a more refined consideration of individual happiness and desires.

The theory of morality-as-cooperation (MAC) argues that morality consists of a collection of biological and cultural solutions to the problems of cooperation recurrent in human social life [1]. It also echoes the characteristics developed by utilitarianism as discussed above, because MAC theory builds upon the consequentialist framework and emphasizes the importance of cooperation among individuals in determining moral outcomes. It recognizes that individual actions can have significant impacts on collective well-being and moral progress. This is extremely similar to the evolution of utilitarianism. The theory also argues that morality evolves through cooperative efforts that promote positive consequences and advance societal values [3]. As will be discussed below, the alignment between morality-as-cooperation theory and utilitarianism lies in their shared consequentialist framework, emphasis on the significance of cooperation for moral outcomes, recognition of empathy and altruism, the importance of social norms and institutions, and the adaptive nature of moral evolution. Together, these similarities reinforce the idea that moral progress is intricately connected to cooperative efforts and the pursuit of the greater well-being of all members of society.

There are three reasons for the consequentialist character of MAC theory. The first two focus on the same characteristics of MAC theory and the last one emphasizes the combination of utilities. And the first one starts with interdependence. Moral cooperation theory recognizes the inherent interdependence among individuals in society. It acknowledges that the actions of one person can significantly affect others. By considering the consequences of cooperative actions, this theory aligns with the consequentialist focus on overall well-being and utility maximization [4]. The second one is a synergy of cooperation. Moral cooperation theory emphasizes that cooperation among individuals can create synergistic effects, leading to outcomes that surpass the sum of individual efforts. This notion resonates with the utilitarian principle of maximizing utility by capitalizing on the benefits derived from collaborative endeavors [5].

While the features of the first two analyses help analyze the correlation between utilitarianism and MAC, it is not the greatest congruence between the two in terms of his ultimate value, but rather long-

term social utility. Moral cooperation theory places importance on long-term social utility, focusing on the collective well-being derived from cooperative actions. It contends that by maximizing social utility, individuals can foster moral progress and create a more harmonious and just society. This aligns with the utilitarian goal of maximizing overall utility [6]. For in this view, individual welfare is integrated. After all, in the fundamental spirit of utilitarianism, it does not harmoniously obtain utility as a whole but rather sacrifices part of its content to maximize the utility of another entity. Conversely, MAC does not have a sacrificial perspective, it speaks into a more harmonious theory.

Moral evolution through cooperation involves several interconnected processes that promote cooperative behavior and align with the principles of utilitarianism. Firstly, empathy and altruism play a significant role in fostering cooperation. When individuals empathize with others and understand their perspectives and needs, they develop a sense of shared responsibility and a willingness to cooperate for the greater good [7]. Secondly, the establishment of social norms and institutions is crucial in promoting cooperative behavior [8]. These norms and institutions provide a framework for individuals to align their actions with collective goals, making cooperation the expected and encouraged social norm.

Additionally, moral evolution through cooperation involves iterative learning and adaptation. As individuals engage in cooperative actions and observe their consequences, they learn from both successful and unsuccessful outcomes. This iterative process allows for the refinement and development of moral principles and strategies that maximize cooperation and positive outcomes, aligning with the utilitarian goal of maximizing overall utility [9]. Moreover, utilitarian decision-making processes are essential in moral cooperation theory. By considering the overall consequences and impact on collective well-being, societies can make decisions that foster cooperative solutions and maximize utility, in line with utilitarian principles [10]. Moral evolution through cooperation is driven by empathy, altruism, the establishment of social norms and institutions, iterative learning, and utilitarian decision-making. These processes work in tandem to promote cooperative behavior and contribute to the overall well-being and happiness of society, reflecting the core tenets of utilitarianism.

Moral cooperation theory, with its consequentialist character, emphasizes the significance of cooperation in shaping moral evolution. Grounded in utilitarianism, it recognizes the interdependence among individuals, the synergy of cooperative efforts, and the importance of long-term social utility. Through empathy, altruism, the establishment of social norms and institutions, and utilitarian decision-making, moral cooperation theory facilitates the development of cooperative behaviors that maximize overall utility and contribute to moral progress. By understanding and applying this theory, individuals and societies can strive for a more cooperative and morally evolved world.

4. The naturalistic and consequentialist criticisms

As mentioned above, as an approach to studying morality MAC theory has been influenced by evolutionary ethics and consequentialism. Yet, it also inherits the defects of both. Similar to other evolutionary explanations of morality, Curry's innovative attempt is inflicted by the naturalistic fallacy as well. Starting from Darwin, the theories of evolutionary ethics have realized the separation of natural facts and moral values, because their interpretation of morality belongs to empirical morality, which is supported by naturalistic partiality and may tend to the "debunking" of morality [11-14] (Joyce, 2006; Wielenberg, 2010; Wolf, 2010; Toner, 2011). As Ruse argued, morality is an illusion of evolution. However, this theory is derived from empirical natural facts and there is a leap from natural facts to moral normativity, thus there could be found Moore's "naturalistic fallacy" [15]. Street describes this problem as a "Darwinian dilemma", which means that this approach by appealing to scientific methods and natural facts sets the descriptive and normative morality against each other, and moral theories either accept the evolutionary stance or face the risk of being unscientific.

This "naturalistic fallacy" has also (to a large extent) poisoned MAC theory, which regards evolutionary ethics as one of its premises [1]. Regarding to Curry's argument, it defines morality as

a set of methods and solutions used to solve social conflicts and cooperative problems [1]. In this sense, he believes that morality is operational social norms that have strong cooperative features. Additionally, this argument is supported by further research, in which Curry and his fellows tested the attitudes of 60 societies around the world towards seven cooperative "moral molecules" he summarized, in an attempt to prove the general acceptance of these cooperative "moral molecules" in these societies [1, 16]. Nevertheless, this sort of way to interpret "morality" may arise a problem shared by other theories of evolutionary ethics: whether morality exists as the norms of action, as the normative values, or as both. In other words, it further implies a question that how the cooperative behaviors in these societies could reflect their people's moral beliefs and values. Curry's study may denote the attitudes of the sample societies toward cooperative behavior, but it is still difficult to find out their attitudes toward moral beliefs and values themselves. There may or may not be a relationship between the neglected normative morality and the empirical morality that Curry attempts to demonstrate. Yet it requires further research and argument, and this relation could not be obtained directly by a naturalistic leap from natural facts to moral values. This kind of "naturalistic fallacy" indicates that MAC theory lacks attention to moral values and normativity, which is considered to be an important part to support moral study [15, 17].

This flaw in Curry's moral research may suggest that the study of "moral evolution" may not only need to focus on the evolution process or the agent's behaviors during evolution, but other factors may also contribute to "moral evolution" [18, 19]. In addition to the metaphysical explanation of morality by moral objectivism, culture, and rationality may also play a significant role in moral development [20, 21]. There are both similarities and differences in the "moral behavior" of humans and animals, for animals are only influenced by biology, but humans are not [22]. Humans are both constrained and influenced by biology and culture. How human morality could comprise both a set of empirical guidelines of moral behavior and normative moral values may be because the two have "reconciled" through a specific moral culture and symbolic system. In contrast with animals, humans making "choices" when they conduct moral behaviors, and culture and beliefs may be one of the reasons that humans are not only restricted by their biology in this process. Likewise, rationality may have also played a key role in the evolution of morality because it is through reflection and deduction that moral values were created and followed [23]. Moreover, it is supposed that the process of moral development is the process of moral internalization from biological behavior to conceptual value [24].

When Curry and his fellows tried to figure out the attitudes of 60 societies towards his seven moral molecules in MAC theory, he only compared and tested them through third-party anthropological literature and documents. Such textual comparison and search may only acquire their attitudes towards cooperative behaviors, but it is difficult to explore the moral beliefs and culture behind these attitudes. For instance, in the trolley problem, although two agents both agree not to change the direction of the trolley, their same decision may be motivated by different reasons and preferences [25]. The research conducted by Curry merely shows that different ethnic groups have consistent attitudes toward rough cooperative ideas and behaviors, but it is difficult to know the reasons why different ethnic groups bear consistent attitudes toward them. In truth, such reasons may be inconsistent, and only after studying the reasons behind these attitudes may be able to understand the moral values behind cooperative behaviors more comprehensively. If the MAC theory only studies the natural facts but not the values and beliefs behind them, it could hardly refute the possibility that their same attitudes towards cooperative behaviors might be a coincidence. Hence, to develop the research further, Curry may need to pay more attention to the concepts and values behind moral attitudes, given that cultural factors may be an important variable.

On the other hand, MAC theory is also flawed due to not only naturalistic preference but its consequentialist base. In evolutionary ethics, there are prominent consequentialist and utilitarian characteristics. Morality is considered to be invented and developed in the process of evolution as it could promote a positive consequence on human evolution, therefore morality is seen as an "evolutionary product". It is believed that moral development is a result of human adaptation to the natural environment [21]. However, it is still questionable whether consequentialism is a moral theory

or not, since consequentialism, which introduces amoral factors into the argument, could barely make a contribution to demonstrate moral normativity. This means that evolutionary ethics fail to make the effective connection between "evolutionary consequences" as natural facts and moral normativity/values, for the "consequences" discussed by consequentialism could be either morally "good" or "bad". As a result, consequentialists who ignore moral normativity are probably prone to rely on "presupposing" some teleological moral values beforehand when developing moral theories. For example, utilitarianism is one kind of consequentialist moral theory that has "presupposed" the "utility" as its source of moral normativity. In this light, consequentialism may need to distinguish between the morally "good consequences" and the "bad consequences", to ascertain a clearer relationship between the moral evolution (as "process") and the moral values as ("consequence").

For evolutionary ethics, its consequentialist premise also fails to settle the problem of the inconsistent relationship between evolutionary processes and moral normativity, because such moral normativity is either presupposed or ignored. If moral morality is the product of human adaptation to the natural environment, the existence and preservation of immoral behavior would contradict the outcome of natural selection. According to consequentialist evolutionary ethics, immoral behavior should have been wiped out in the process of evolution because of its inadaptability. In addition, it is also worth discussing how the accidental "good" in the evolution process becomes the consequential "good" as moral normativity. However, the specific mechanism of how agents recognize the consequences of their actions often troubles consequentialism, and it is skipped over. Thus, to construct the theory, it may be inevitable for consequentialists to make an arbitrary connection between the two, by arguing that normative morality is also caused by human's adaptive process in evolution. Morality could also oppose the adaptive principle of human evolution, such as the contemporary Animal Rights Movement [26]. This may indicate that evolution and morality have only limited interactions, that human morality may not only be shaped by evolution and evolutionary process alone could not properly explain morality. If consequentialists do not intend to modify the arbitrary connection between the evolution process as natural facts and the normative morality as a "consequence", it may be still difficult for consequentialism to help evolutionary ethics to overcome the "naturalism fallacy".

MAC approach also applies consequentialism as the premise to some extent, pointing out that cooperation could develop and evolve into "morality" because it could enhance the adaptability of the group. This is akin to other evolutionary ethical theories and thus it bears similar consequentialist defects to them. Wong believed that the definition of cooperation in MAC theory is not clear and proper enough [16]. Curry equates morality to cooperation, but it is likely to imply a conclusion that "cooperation" is "good" in the moral sense. However, there are "good" cooperation and "bad" cooperation in the meantime. "Good" cooperation may suggest an empirical and descriptive moral principle, but "bad" cooperation cannot be ignored in this process. The Nazi massacre bureaucratically organized, for example, was a sophisticated and effective practice of cooperation, but this type of cooperation may not adhere to people's moral intuition [22]. Hence, Curry's attempt to build a link between cooperation and morality could hardly avoid evaluating the moral value of cooperation itself, which MAC theory seems to fail to do so. The reason may be because MAC also teleologically presupposes the moral normativity of cooperation as other consequentialist evolutionary ethics. Consequentialist evolutionary ethicists rely on the trends and consequences of evolutionary development to presuppose the source of their moral normativity, which leads them to argue that "goodness" and "morality" are normative because they can promote evolution. Though Curry more specifically pointed out that, due to its positive effects to promote evolution and development, cooperation could acquire moral normativity and thus is morally "good", this argument neglect to probe the moral nature of "cooperation" itself and other consequence it may cause.

Needless to say, the discussion of moral values is an important part to support moral study [15, 17]. The presupposed moral normativity of consequentialism may render this process able to be constructed and conducted without discussing moral values, but the moral theory itself would become vulnerable. This kind of consequentialist preference neglects to discuss the moral value of

"cooperation" as a natural fact. The consequence is that "cooperation" is relatively synonymous with moral normativity in Curry's view. Therefore, roughly equating morality with amoral "cooperation" tends to show that the definition of "cooperation" defined by him is not clear and proper enough. In this sense, there might be a way out for MAC's approach to revise its relationship between cooperation and morality, by exploring what kind of cooperation is morally desirable while others are not.

5. Conclusion

Hitherto, this study has introduced Curry's creative interpretation of morality named "MAC", a moral theory of evolutionary ethical features. It argues that cooperative solutions in the process of natural selection could promote group adaptability and thus they evolve into contemporary "morality". In the meantime, the defects of this approach are also discussed above. As with other evolutionary ethics, MAC theory suffers from the naturalistic fallacy of leaping from natural facts to moral values. Besides, it ignores the discussion of the moral value of cooperation itself by presupposing the moral normative nature of cooperation due to its consequentialistic characteristic. Although "cooperation" did have certain relation with "morality" and its evolution, it entails further evidence to ascertain how cooperative behavior in the evolution process could contribute to constructing human moral values and normativity. However, this essay also ignores the discussion of the moral normativity of "cooperation" in particular whereas simply pointing out that MAC theory lacks the emphasis on the moral normativity of "cooperation". This could be one of the directions for the improvement of evolutionary ethics and Curry's research. Despite the flaws of his attempt, it still contributes to the advance of moral theory. By referring evolutionary stance as its premise, Curry also extends the possibility of probing morality to other disciplines beyond philosophy, and it endeavors to use scientific methods to conduct and support its argument. As a consequence, it has put pressure on the evolution of traditional moral study epitomized by philosophical ethics. It is an innovation for exploiting moral lore that adopts anthropological methodologies and combining it with moral psychology. Perhaps it indicates that more disciplines and research methods could participate in discovering moral theory.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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