

Is The "Economic Man Hypothesis" a Reliable Explanation for Altruistic Behavior? an Analysis Based on the Philosophical Psychology

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Abstract. The interpretation of altruistic behavior is related to the establishment of moral normative theory. However, the explanation from "economic man hypothesis" and utilitarian will lead to the dilemma that altruistic behavior is "either hypocritical or stupid". This dilemma arises because philosophers have failed to understand the mechanisms underlying human altruistic behavior. Recent research in psychology has provided a lot of new evidence, which could be able to resolve this dilemma. For example, the results of some behavioral experiments demonstrated that there is a loophole in the "economic man hypothesis", in another words, altruism can be both pure and wise. Future research needs to explore the essence structure of altruistic behavior by fully combining the strengths of philosophy and psychology.

Keywords: altruism; philosophical psychology; intrinsic reward.

1. Introduction

In moral philosophy, the interpretation of the source of altruistic behavior is an ontological issue, and this interpretation is directly related to the basis on which a normative theory of morality is constructed. Economics and utilitarian philosophy usually treat altruistic behavior as an exchange based on personal benefit. which in common parlance means 'all for one and one for all', which denies the possibility of pure altruism at all, leaving an altruistic act in the dilemma of 'either hypocrisy or stupidity'. To solve this issue, some philosophers have hypothesized that altruistic behavior may be influenced by an intrinsic moral motive and that this mechanism may bring some moral pleasure to the person, which in turn compensates for the loss of benefit. But because of the impotence of the philosophical meditation in probing the physical laws of things, so that we do not yet know the intrinsic biological mechanism of human altruistic behavior. The explanation for this mechanism is limited to the level of hypothesis and not supported by empirical evidence, so as to the issue has never really been solved.

The emergence of experimental psychology in the 20th century offered the possibility to address this issue. Psychologists devised various experiments to test the reliability of various philosophical hypotheses. In particular, with the widespread use of fMRI (functional Magnetic Resonance Imaging) technology in psychology after 2000, psychologist could observe the psychological processes underlying altruistic behavior in a more visual way. (1) Behavioral experiments in psychology have demonstrated that altruistic behavior occurs because it can be influenced by intrinsic benefits and that altruistic behavior is not exclusively an exchange of benefits. (2) fMRI experiments have shown that the mirror neuron system associated with emotions and the reward system of the brain play a fundamental role in the elicitation and maintenance of altruistic behavior.

2. The explanatory dilemma of the "economic man hypothesis

The "economic man" hypothesis denying the existence of altruism, arguing that all altruistic behavior has some self-serving purpose. What appears to be altruistic behavior is still motivated by self-interest, and altruistic behavior is essentially "hypocritical". There are several ways of arguing for this view.

The first is reciprocal altruism, where the actor who act altruistically is not in order to improve the welfare of the recipient, but in the hope that the recipient will reciprocate his 'good deed' in an appropriate way, which is essentially an exchange of benefits. The American sociologist Peter

Michael Blau summarizes this form of altruism in this way: "A person who does not repay a favor is accused of being an ungrateful villain. This accusation shows that people expect something in return, and it acts as a social punishment so that individuals do not forget their obligations to others. People are generally said to be grateful for favors and to pay their social debts." [1]. Reciprocal altruism is a common form of social interaction, and altruistic behavior could be understood as an economic game and investment essentially.

However, the problem with reciprocal altruism is that it cannot account for the fact that many altruistic behaviors, such as charitable donations or concern for the disadvantaged in society, are done without expecting anything in return at all. This leads to a 'long-term benefit' argument, which means that the aim of an altruistic act is not necessarily to receive an immediate return from the recipient, but rather to receive a longer-term and broader return. For example, if an entrepreneur sponsors a primary school, he will not receive a return from the students who attend the school, but he will be able to reap the benefits of a generous and responsible social rating, and his altruistic behavior is essentially an advertising investment.

The "long-term interest" point still leaves an unexplained phenomenon that some people can perform truly altruistic behaviors without compensation, such as anonymous donations or other altruistic behaviors that hide their identity. This leads to the argument of utilitarianism: if all people in society are selfish, the interests of all people are inevitably lost, so the value of truly altruistic must be promoted in order to guide people's behavior, bridge social differences and promote interpersonal cooperation, and over time altruism will become a social trend. But the essence of this argument is an extended version of the 'economic man hypothesis', and it would lead to a serious consequence. The most rational choice for one person is to act altruistically on the surface, while still preserving his personal interests, because that the best interest is to promote its own interests and morality is merely to preserve the order of society. Those who act purely ethically are simply deceived by well-meaning lies and are therefore irrational. This leads to the dilemma of "either hypocrisy or stupidity", in another words, if a person acts altruistically for short-term or long-term gain, then this altruistic behavior is not an aim in itself but a means to an aim, and the person is hypocritical. While, if a person only follows the moral requirements of society and acts altruistically regardless of his own interests, then he is unaware of his own personal interests, then this person is unaware that he is deceived by society and is therefore foolish. Therefore, the dilemma of "either hypocrisy or stupidity" is obviously a picture we cannot accept. At the same time, although both Adam Smith and Henry Sidgwick try to argue that individual self-interest could evolve into altruism, but there remains the problem that in a society where altruism is the moral ethos, the optimal choice for a prudent person is to use altruistic behavior cleverly to satisfy his own private interests without being detected by others, and thus to gain the greatest personal benefit. However, when everyone is aware of this behavioral pattern, the lie of "altruistic morality" will be exposed and the social order based on it will not be maintained, which means that the utilitarian argument is self-contradictory.

To address this issue, Hume attempts to demonstrate that altruistic behavior may be driven by other motives, such as empathy. In Hume's view, the altruistic motivation based on the empath with the emotions of others in distress, while at the same time, if we choose not to help others, then we will feel restlessness under the condemnation of our 'moral conscience'. Alasdair MacIntyre summarizes this explanation as intrinsic rewards, in which it is argued that the behavior of individuals is not solely driven by external material gain, but also by intrinsic elements such as the pursuit of personal integrity and moral excellence. However, this argument also suffers from the problem of being unprovable, these intrinsic elements can be completely reduced to the "long-term interest". A person will develop a habitual pattern of thinking because of long-term existence of the "long-term interest", in this way, the reason for the uneasiness is worried about the possibility of future loss, but not the empath. And then, if there is no possibility of future loss, the empath will be a mistake, a conventional thinking and a failure to think rationally.

Therefore, in order to prove the existence of intrinsic rewards, it is necessary to find a concrete form of intrinsic rewards and thus to challenge the "economic man hypothesis" on a factual level. This task could be accomplished by a series of experiments in psychology.

3. Intrinsic rewards can motivate altruistic behavior: evidence from behavioral experiments

The sustainable of one behavior is based on rewards (whether explicitly or implicitly) acquired in some way, otherwise this behavior could not exist at all. The "economic man hypothesis" assumes that such rewards are material benefits, leading altruistic behavior to the dilemma of "either hypocrisy or stupidity". However, psychological research has shown that people can behave altruistically for reasons that are neither short-term interest nor long-term interest, and at the same time are the result of their own rational thinking.

In addition to the extrinsic benefits, psychological research has found that the behavior could also be elicited by the intrinsic rewards. Extrinsic rewards are material benefits, interpersonal benefits or other conditions that can bring about these benefits, such as opportunity, status, working conditions and so on. Intrinsic rewards are the psychological pleasure that the behavior itself gives, or the fact that the behavior can be used as an aim in itself, rather than as a means to acquire other aim. A series of experiments shows that altruism can bring a range of psychological and physical pleasures quickly while alleviating psychological and physical discomfort. Altruistic behavior can be beneficial in itself, altruistic behavior could be treated as an aim independently rather than as a means to pursue external benefits.

Firstly, altruism could bring about positive emotions. Participants who don't help another person when the person fall into distress will feel uneasy and this unease will be alleviated by altruistic behavior, which explains why many people feel better after they have done something moral [2]. Similar findings are supported by a questionnaire study, which found that altruistic behavior can help alleviate negative emotions while maintaining continued emotions [3]. A survey showed that the individuals spent more money on others, the more happiness they experienced. Subsequent experiments confirmed this survey, the participants who were randomly assigned to spend money on others experiencing more happiness than those who were assigned to spend money on themselves [4]. This survey was then extended to 136 countries worldwide and found that altruistic spending was associated with higher levels of happiness in both poor and rich countries. The participants who were randomly assigned to buy items for charity reported higher levels of positive emotions than those who were assigned to buy the same items for themselves [5].

Secondly, altruistic behavior could also bring about physical comfort. The internal rewards of altruistic behavior are multifaceted, including not only a good mental state, but also increased physical comfort and fitness through the 'body-mind' system. Temperature is one of the basic needs of human survival, and humans naturally prefer warmer things. Hu and his cooperators designed a series of experiments to explore the effects of altruistic behavior on temperature perception [6]. In the experiment, volunteers in a heated room were asked to perform a series of altruistic behaviors, such as sharing food with others and donating money to children in remote mountainous. They found that volunteers who performed the altruistic behavior felt warmer in the heated room than those who did not. In addition, Altruistic behavior could also reduce the weight of the body. In a series of experiments conducted by Li and Xie, they found that people who helped others carry their drinks felt lighter than those who carried their own boxes of drinks to the third floor. They also found that donors had a closer estimate of the distance and also perceived less effort to complete the same physical task compared with non-donors [7]. The research by Xie Xiaofei's team at Peking University found that altruistic behavior can also reduce pain in people [8]. Firstly, they compared cancer patients who cooked for others to those who cooked for themselves, and then found that those who helped others reported less pain. Secondly, they found that volunteers who donated blood to quake-hit areas perceived less harm from the needles than those who donated normally. Finally,

experimenters compared the tolerance of electric shock stimuli between those who donated to orphans and those who refused to donate, then they found that donors were more able to tolerate electric shock injuries. Besides, numerous physiological studies have shown that the positive emotional experience triggered by altruistic behavior could improve the functioning of the immune and cardiovascular systems, regulates blood pressure and heart rate, and increases the body's production of beneficial hormones, enzymes and acetylcholine, increasing the body's resistance to disease and leading to a healthier and longer life [3].

It could be inferred that an individual's altruistic behavior can be guided by intrinsic rewards, rather than by profit exchange or irrationality. In other words, the individual who performs an altruistic act can be sincere and wise at the same time.

4. Neural evidence of intrinsic rewards: the reward system of the human brain

Neuropsychological experiments can make more intuitive evidence than behavioral experiments. If we admit that all conscious phenomena are dependent on a physical vehicle, then the brain activity of human beings in altruistic behavior can certainly provide direct evidence of the relationship between altruism and intrinsic rewards.

Recent research in neuroscience has revealed that there is a reward system in the human brain that is activated when certain behaviors occur, which means that the person is experiencing various positive emotions and this emotion could encourage to continue with such behaviors. The reward system is related to reward signals and positive emotions and participates in the information processing and evaluation of reward anticipation, which is the source power of most human behaviors. It is generally accepted that the reward system consists mainly of the ventral tegmental area, the nucleus accumbens, the dorsal striatum, the ventral striatum, the caudate nucleus and the orbitofrontal cortex, and so on.

Quervain and his cooperators conducted an experiment in which volunteers were asked to act as a third party to observe a monetary distribution task being carried out by another group of volunteers. If someone treated other partner unjustly in the distribution, the volunteer from third party had the right to punish the unjust person monetarily. This experiment found that when the volunteer from third party fought for the person experiencing the injustice and punished the unjust person, his dorsal striatum (It is generally believed that the dorsal striatum is primarily responsible for the reward) was activated [9]. In another experiment conducted Moll and her cooperators, they scanned the brain activity of volunteers who were engaged in a charitable donation task. And then they found that the amount of individual's donation was significantly and positively correlated with the activity of the ventral striatum. Besides, the reward area involving the midbrain was activated to the same extent under both conditions where individuals freely chose to donate to charity and where they received a monetary reward [10]. This result means that the volunteers experienced similar pleasure with the monetary reward and the voluntary donation, and the greater the amount of money donated, the more intense the pleasure experienced. Both studies suggest that altruistic behavior may be related to the reward system. At the same time, when an individual realizes that his altruistic behavior may receive social recognition, the intensity of activation of his reward system will be enhanced whether or not this recognition leads to direct benefits, such as gratitude from the recipient, praise from those around him.

5. Possible challenges and future perspectives

Evidence from psychology has found that human behavior is not only driven by external rewards as perceived by the 'economic man hypothesis', but also by intrinsic rewards. Behavioral experiments illustrate that at the physical level, altruistic behavior can increase physical comfort and health, reduce pain and improve certain chronic diseases; at the emotional level, altruistic behavior can enhance feelings of self-worth and bring about positive emotional responses.

Neuroscience experiments have shown that the reward system in brain could maintain altruistic behavior. Thus, the intrinsic rewards from altruistic behavior do exist, so that the "either hypocritical or stupid" dilemma exists because the "economic man hypothesis" ignores the role of intrinsic rewards in altruistic behavior.

However, some scholars question that the intrinsic rewards caused by people's altruistic behavior are still a result of social and moral indoctrination. Individuals would develop an "altruistic-external reward-pleasure " neural links, such that pleasure is still produced when altruism does not elicit extrinsic rewards, which is in fact a neurological deception of itself. In addition, it can also be questioned whether the efficacy of intrinsic rewards is too weak to sustain a system of normative ethics. Although intrinsic rewards can generate motivation, most of the time this intrinsic tendency to altruism gives way to sophisticated calculations of benefit.

These questions need to be taken seriously and constitute future directions for research on this issue. First of all, it is true that human behavioral tendencies and motivational systems are formed by a combination of innate biological foundations and acquired indoctrination. The fact that people develop the mechanism of "altruistic-intrinsic reward" on the one hand shows the evolutionary superiority of this mechanism, on the other hand, it also shows that this mechanism is universal. In this way, the construction of normative ethics on this basis is not a problem, but the specific process of the formation of this mechanism, that is, the role of nurture in shaping human neural reactions, is still insufficiently studied. Secondly, the question of the ineffectiveness of intrinsic rewards may be underestimated. In fact, even in the field of economics, where the "economic man hypothesis" originated, researchers have begun to recognize the enormous role of emotions and have built on this to create what has been called the "fourth revolution" in economics. For example, The Israeli economist Daniel Kahneman was awarded the 2002 Nobel Prize in Economics for his work on the role of emotions in economic decision-making, and his work has even been called "hedonic psychology". Of course, the current research should not stop there. Whether intrinsic rewards and extrinsic rewards can be converted and how to convert them are still a blind area of research. However, the reward system in the human brain is a very complex system, which is activated differently by altruistic behavior in different contexts. These are the areas that need to be focused on in the future.

Since 2000, the use of psychology to solve philosophical problems has become a very common approach and has produced many results, even in Europe and the United States where the "naturalism" or "materialism" has even become a "prominent science". It has been pointed out that "in the present case, there is no other systematic ontological position that can compete with materialism. As a result, the most typical theoretical constructions in philosophy and science are in one way or another subject to the conceptual ideas introduced by materialism." [11]. Therefore, future research on the motivation of altruistic behavior can attempt to explore from the perspective of the intersection of psychology and philosophy.

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