

## A New Taxonomy of Altruism in Terms of Prosocial Behaviors

Kristin Kaiser

Department of Biology; College of Arts and Sciences  
Abilene Christian University

**The definition of altruism has been studied, explained, and even confused by many scholars in various fields. The term itself has been inappropriately used to describe prosocial behaviors that do not fall within the definition of altruism. An evaluation of Grant Ramsey's taxonomy of altruism, which includes biological altruism, psychological altruism, and helping altruism, proves that it is not adequate in categorizing organism's behaviors. A new taxonomy, with the branches of kin selection, reciprocity, and aesthetic altruism, is presented and explained to clarify the definition of altruism and alleviate confusion about how to describe prosocial behaviors. Both naming systems are analyzed according to the evolutionary or Biblical influences that impact certain behaviors among organisms. It is concluded that the new taxonomy is a more accurate tool for classifying all prosocial behaviors in the world.**

*Altruism*- this term has been used to describe prosocial behavior in not only humans, but throughout all other organisms in nature. Multiple fields of study explore altruistic concepts, including biology, psychology, theology, and philosophy. Altruism is taught in Biology classes using examples such as bee and ant colonies, whereas in Psychology classes, it is taught as a social behavior in humans. Theology classes often teach the Christian love command and relate it to an altruistic lifestyle. Progressively, the definition of the altruism seems to have been blurred, as people often mistakenly use it to characterize actions that are prosocial, but not truly altruistic. The confusion has created a society that believes altruism is an umbrella word that contains an abundance of human behaviors; in reality, though, altruism describes a very distinct, idealistic, group of human behaviors. It's time we begin classifying the prosocial behaviors of human beings correctly. Grant Ramsey argued for three different classifications of

altruism.<sup>1</sup> However, he missed the mark. He, too, falls prey to the hazy meaning of altruism and calls certain behaviors altruistic when in fact, they are acts of kin selection or reciprocity. A new taxonomy of prosocial behaviors with clear distinctions would be better equipped to classify various human actions. In discussions about the occurrences of altruistic actions, people seem to either argue for an evolutionary explanation, or a theological explanation. In the new taxonomy of prosocial behaviors, which I develop here, a 'both-and' approach with a dialogue between evolutionary science *and* Christian theology is used rather than an 'either-or' conflict view. Most prosocial behaviors are adequately described naturalistically alone whereas others seem to have something of the divine about them. We will explore this new taxonomy in this paper.

To begin to understand what altruism is, a review of the origin of the word and its concepts is necessary. Actions that are social, positive, and aimed toward others are

---

<sup>1</sup> Ramsey, 2016

considered prosocial behaviors.<sup>2</sup> These actions involve helping others and include volunteering and sharing. Altruism is a similar, but distinct concept. Altruism is often used to describe merely prosocial behaviors. Altruism is helping others at the expense to oneself. For an action to be considered altruistic, it must benefit another organism or human, while inducing a cost to the acting member of the interaction.

Auguste Comte was a French philosopher who coined the term ‘altruism.’<sup>3</sup> He used this word to describe the human instinct of benevolence. He claimed that unless this instinct was cultivated by good objectives, it was rather weak.<sup>3</sup> Although Comte was the first person to call human behaviors altruistic, he was not the only philosopher to have a definition for the word. Comte’s definition of altruism included the eradication of egoism and using one’s life to improve the well-being of others.<sup>4</sup> Since his original use of the term, scholars from various fields have offered other definitions. For example, Mattheiu Ricard emphasizes the importance of motivation in determining whether an action is altruistic or not. He argues that because humans have finite ability to control our environment or predict changes, acts cannot be considered altruistic or egoistic on consequences alone. Motivation is key.<sup>5</sup>

Stefan Klein is a German physicist who presents a contrast and analysis of egoism and altruism. He claims that the current understanding of altruism, which involves morality, is more simplistic than it should be because it fails to explain the reasons people behave altruistically.<sup>6</sup> Yet another example of a scholar who defines altruism in a slightly different way is Grant Ramsey, a member of the Institute of

Philosophy at KU Leuven. He studies and writes on the philosophy of biology. The intention of his article is to develop a taxonomy of altruistic acts to help clarify the pluralistic nature of the word. While constructing his taxonomy of altruistic behaviors, he relies heavily on the work of Christine Clavien and Michel Chapuisat, who presented four classifications of altruism. Ramsey argues for three rather than four. The three taxonomical distinctions he provides are biological altruism, psychological altruism, and helping altruism.<sup>7</sup>

## **Ramsey’s Taxonomy**

### **Biological Altruism**

The first of three distinctions made by Ramsey is biological altruism. This distinction is also commonly called evolutionary altruism or reproductive altruism, though Ramsey claims a better term would be selection or fitness altruism. The main point of this category is that an act can be considered altruistic only if the actor’s fitness is decreased while the fitness of others increases.

This form of altruism does not have its basis on the results of actions by an individual. Instead, its basis is on the probable results of the individual’s actions and its tendencies. He argues that fitness is a predisposition and it is unchanging throughout the life of the organism, and this leads to the biological altruism distinction.<sup>8</sup> This form of altruistic behavior shows up frequently in Class Insecta, as described next.

A common example of this type of altruism in scientific conversations is worker bees.<sup>9</sup> Worker bees forfeit their reproductive abilities in order to provide resources for the

---

<sup>2</sup> Carter, 2014

<sup>3</sup> Philips, 2016

<sup>4</sup> Ricard, 2013

<sup>5</sup> *ibid.*

<sup>6</sup> Klein, 2014

<sup>7</sup> *op. cit. ref. 1*

<sup>8</sup> *ibid.*

<sup>9</sup> Ratnieks & Wenseleers, 2008

queen bee. The queen bee does not forage for resources, but instead, produces the offspring of the colony. This type of interaction fits within Ramsey's classification of biological altruism because the worker bee permanently decreases its own fitness while increasing the fitness of the queen bee. The cost of this behavior is that the worker bee will not get to produce offspring and pass along its genes (even though, at a genetic level the fitness of the worker's genes is enhanced). Colonies of ants operate in a similar manner<sup>10</sup>, and thus, can also be considered examples of Ramsey's biological altruism.

### Psychological Altruism

The next classification in Ramsey's taxonomy is psychological altruism. Biological and psychological altruism are two distinct concepts that do not have a unifying conceptual bridge. Ramsey argues that for a behavior to be considered a form of psychological altruism, it must be motivated by an ambition to help increase the well-being of others. This form of altruism relies on the organism's psychological circumstances. Unlike the biological form, psychological altruism is less dependent on the outcomes of the actions of the organism. However, it is not a requirement for these psychological circumstances to be acknowledged by the acting organism. This sense of altruism does not depend on biological fitness.<sup>11</sup> This division is similar to Ricard's definition of altruism in which motivation is the primary factor in considering the altruism of an action.

The actions of an individual who volunteers their time at a soup kitchen serving meals to those who are less fortunate, may or may not be considered psychological altruism. In order to be

classified in this category, the individual must be volunteering their time because they have an ultimate motive to help the people receiving the free meals. Even if the food is tainted and ends up causing sickness in many of the recipients, the volunteer will still have been acting altruistically. On the other hand, an individual who is volunteering at the soup kitchen and ends up helping many recipients, but has the primary motive of gaining votes in an upcoming political election is not acting altruistically. Although the actions of the volunteer are the same, the motivations are not.

### Helping Altruism

Discussions of both the biological and psychological classifications of altruism are frequently developed in literature, albeit occasionally using a slightly different term. Ramsey's last division, however, is less common in literature, but is still significant. His last altruistic subdivision is termed 'helping altruism.' This whole concept has its foundation in human beings helping one another. In this form, the benefit for others does not have to be related to biological fitness or motivated by psychological ambitions. Behaviors considered helping altruism may impact biological fitness or stem from an ultimate desire to help others, but it is not a prerequisite. Instead, helping behaviors are considered altruistic if it benefits another individual with a cost to the acting individual. Also, there must be no positive compensation for the behavior. Of utmost importance in classifying behaviors as helping altruism is that the helping must not be a mistake.<sup>12</sup> This taxonomical branch seems to include behaviors that are deemed altruistic, but do not meet the requirements of either of the other two categories presented by Ramsey.

---

<sup>10</sup> *ibid.*

<sup>11</sup> *op. cit.* ref. 1

<sup>12</sup> *ibid.*

For example, a man is driving down the highway and sees a family sitting outside their minivan on the side of the road. He notices that the father is working on something under the hood of the vehicle. The man pulls over and offers to assist the family in getting their vehicle running. The actions of the man who pulled over and aided the family would be considered helping altruism because they were unrelated to biological fitness and were not necessarily connected to his psychological desires. In comparison, a track relay team who drops the baton helps their opponents win the race, but is not operating within the definition of helping altruism. Dropping the baton was a mistake, and thus, cannot be classified this way. Both of these behaviors involve human helping, but only one is helping altruism.

### A New Naming System

Ramsey provides a useful way of separating human helping behaviors into distinct categories. However, by identifying them all as altruism is simply incorrect. Altruism requires that an individual benefit another with a cost to itself. An individual who helps another, but receives a benefit is not acting altruistically. Worker bees which are considered to be acting within biological altruism receive the benefit of having their population continue to grow. "Brain research in fact shows that altruism activates the same synapses as eating a chocolate bar or having sex,"<sup>13</sup> so volunteers at a soup kitchen or a man who assists a family on the side of the road receive the benefit of feeling good because of their actions.

A better way of classifying human prosocial behaviors would be to create a whole new taxonomy. I want to introduce a new naming system with three similar, but more accurate distinctions, to differentiate

between prosocial and altruistic behaviors and elucidate any confusion. The three divisions in this new arrangement are kin selection, reciprocity, and aesthetic altruism.

### Kin Selection

The first branch of the new taxonomy is kin selection. Kin selection is an evolutionary strategy employed by many species in all different biological taxa. The term was originally used by Maynard Smith in 1964, but the idea was expounded on by W.D. Hamilton.<sup>14</sup> Essentially, kin selection is the idea that organisms will behave in a prosocial manner towards others who are more genetically related. There are two main underlying ideas here. First, in an interaction between organisms that share genetic material, "they may have an evolutionary incentive to help each other."<sup>15</sup> Second, it seems "that the size of the incentive to help is proportional to the degree of relatedness between them."<sup>16</sup> An organism is more likely to receive aid from a genetic relative than from an organism who has very few similar genes. When Ramsey uses biological altruism as a description of organism behavior, what he describes is kin selection. In nature, when an organism decreases its own fitness to increase another's, it is typically because they are genetically related. Continuing with the bee example, worker bees give up their reproductive abilities to provide for the queen who is a very close genetic relative. The worker bee is still benefitting because a clear majority of its genes will be passed on to the next generation through the queen bee.

Therefore, these actions should not be considered altruism of any kind. Instead, they should be considered kin selection. Another human behavior that should be characterized as kin selection, but is often called altruistic in today's world, is a mother

---

<sup>13</sup> Klein, 2014, p. XIII

<sup>14</sup> Birch & Okasha, 2015

<sup>15</sup> Birch & Okasha, 2015, p. 22

<sup>16</sup> *ibid.*

who runs into a busy street to get her child out of danger. The mother would be risking injury or death to protect her offspring. This is not an altruistic act because the mother benefits from the child's safety. The mother will be able to continue to receive love from the child if she runs into the busy street. This is an act of kin selection. The mother would be much less likely to run into the busy street for a complete stranger than she would be for her own child. Many human prosocial behaviors that are often called altruistic should be characterized as kin selection.

### **Reciprocity**

The next category in the new taxonomy should be reciprocity. Reciprocity is when an organism acts in a prosocial manner with the expectation that the other organism will return the favor in the future. These kinds of behaviors are common in humans as well as other animals. Research has shown that reciprocity is fundamental in human behavior and lays the foundation of trust in human societies.<sup>17</sup> The common saying "I'll scratch your back, you scratch mine" is the sound bite phrase of reciprocity.

It is very typical to see both scholars and laypeople describe human behaviors as altruistic, when what they mean is reciprocity. Most human beings help others with the anticipation that if the roles were to be reversed in the future, others will act similarly. This holds true whether the actor is cognizant of this expectation or not. A nonhuman example of reciprocity is vampire bats. These animals will often ensure that members of their roost that cannot feed themselves get proper nutrition. Vampire bats will regurgitate previously ingested food so that members of their roost can eat.<sup>18</sup> This food sharing behavior is done in a reciprocal manner, as the bat who shares its

meal with others expects that the other bats will behave similarly in the future. Reciprocal behaviors in humans are very common. For instance, a person who offers to assist a friend in setting up their new television is acting reciprocally if they believe that the friend will repay the favor in the future. Acts of reciprocity are not acts of altruism because the actor receives a benefit from their behavior in future interactions. Acting in a way that helps others increases the likelihood that an individual will be helped in the future. This cannot be considered altruism. A person who offers their help in return for help in the future will be acting reciprocally, not altruistically. These two words and their definitions are not compatible with one another.

### **Aesthetic Altruism**

Finally, the third division of the new taxonomy should be aesthetic or true altruism.<sup>19</sup> Behaviors in this category are the only ones that can truly be considered altruism. This classification is very idealistic for human beings. There are very few individuals who have acted in a manner that could be classified as aesthetic altruism. Even though it is possible to sacrifice oneself exclusively to help others, it is certainly not an evolutionary reliable approach.<sup>20</sup>

Aesthetic altruism requires that behaviors must help others and be costly to oneself. Receiving any form of reward or benefit for an action immediately discounts it from being altruistic. In other words, behaviors cannot be both, altruistic and egoistic. Aesthetic altruism demands "complete self-giving that is the essence of God."<sup>21</sup> The greatest and most perfect example humanity has of this is that of Jesus Christ. He descended from Heaven to save

---

<sup>17</sup> Berg, Dickhaut, & McCabe, 1995

<sup>18</sup> Carter & Wilkinson, 2013

<sup>19</sup> Brannan & Gillett, 2005

<sup>20</sup> *ibid.*

<sup>21</sup> Mahoney, 2010, p. 697

all human beings. He relinquished his Heavenly riches, became human, and was eventually mocked and tortured until his death. These actions were done with pure love and a desire to benefit all people. The Bible eloquently explains that Jesus' selfless actions were performed "so that by the grace of God he might taste death for everyone" (Hebrews 2:9, New International Version). This behavior cost him everything, including his life, while helping all humans on earth. Jesus received no benefit from his altruistic behavior. Some may argue that he did, in fact, receive compensation for his actions. He conquered the grave and ascended to Heaven again. This is true, but it cannot be considered a benefit of his actions. Had he not left Heaven in the first place, he would have kept the riches he had there. Jesus gained nothing more than what he already had and chose to give up. Therefore, he did not benefit from his self-sacrificial behavior.

Thus, this action is classified as aesthetic altruism. Although Jesus' actions are the perfect showcase of aesthetic altruism, and it is extremely difficult for any human to behave similarly, there are some who do. There are certain saints who live lives of aesthetic altruism. In particular, Mother Teresa is known for her selfless behaviors. She spent time with people who suffered from leprosy and chose to live in a slum. These actions are often argued to be egoistic because she felt good about what she did. However, evidence from her diaries prove otherwise. She was often miserable, felt that God had abandoned her, and could not understand her own motivations.<sup>22</sup>

Mother Teresa did not benefit from her extreme self-giving behavior. She, along with many other saints who behave comparably, is an example of aesthetic altruism.

A third possible example requires a more detailed examination to determine

whether it is altruism in the true sense. Dr. David and Laurie Vanderpool started an organization in Haiti called LiveBeyond.<sup>23</sup> Dr. Vanderpool graduated from the University of Texas Tech School of Medicine before becoming a vascular surgeon. He opened his own private practice, Lave MD, which was both a clinic and spa in Tennessee. He often went on short term missions to aid countries after natural disasters, and he was a first responder in Haiti after the hurricane in 2010. While there, he saw the devastating need of the country and its people. He and his wife decided to sell everything, including his private practice, and move to Haiti on a permanent basis. They do incredible work for the people of Haiti. They have a clinic in which they provide medical care to many individuals who would otherwise have none, take food and water to the marginalized in various villages, and have provided clean water wells for Thomazeau, the city in which they are located. These actions cost the Vanderpools time, money, and their quality of life in the United States. They only take a trip to America about once or twice a month, and it is only to fundraise, not to travel or see family. Also, the couple has subjected themselves to deadly diseases, such as malaria, chikungunya, and the zika virus. They risk their safety every time they visit a village to aid the marginalized. The Vanderpools are unwelcome in Haiti; they are threatened by violent Haitian men routinely. There are often days where the acts of selflessness are incredibly rewarding for this man and his wife. However, much of their time is spent struggling to provide the best care possible. The self-giving of this couple mirrors how Jesus lived his life. Jesus gave up everything in Heaven and spent time loving on the diseased and outcast. The Vanderpools operate similarly

---

<sup>22</sup> op. cit. (ref. 6)

<sup>23</sup> LiveBeyond, n.d.

by giving up their American riches to care for the outcast in Haiti. Jesus is the perfect example of altruism, and while human beings, including the Vanderpools, are not perfect, these behaviors are still considered aesthetic altruism.

## Taxonomy Influences

Now that the new taxonomy of social behaviors has been explained, it is important to look at the factors that influence the branches. Altruism is often described as the outcome of either evolution or the Christian love command. All the divisions of the taxonomy described by Ramsey can be explained by evolutionary processes. The new naming system though, has two distinctions. Evolution leads to kin selection behaviors, as well as reciprocity behaviors. Evolution supports most kin selection because organisms who sacrifice themselves for the betterment of their genetic relatives protect the passage of genetic material to the next generations.<sup>24</sup> Nature will select species who perform kin selection behaviors, and there will continue to be offspring produced. Evolution also supports reciprocity among species because there is an expected benefit to the actor. Reciprocity benefits the actor in the future if they are in a potentially harmful situation. These types of actions are not mistake proof. Mistakes in reciprocity can be detrimental, but they also result in a social organization that is better selected for.<sup>25</sup> Evolution will select species who protect their genetic relatives to further their germline and those who participate in reciprocity.

In a comparable manner to the influence of evolution, the Christian love command leads Christ followers to aesthetic altruism. The Christian love command is the command given by God to love others unconditionally. There are many passages

that are expressions of this command. The clearest mandate is, “A new command I give you: love one another. As I have loved you, so you must love one another” (John 13:34). Another passage in the Bible calls humans to leave their family in order to lead others to the Kingdom of Heaven (Luke 9:60-62).

Lastly, one of the most familiar passages that expresses the Christian love command is “love your neighbor as yourself” (Matthew 22:39). The common interpretation of this verse, “treat others how you want to be treated,” seems to promote reciprocity. However, it is calling humans to more than just reciprocity behaviors. It is a call to a life of aesthetic altruism. Humans are egoistic creatures, so to love others as oneself is to treat them with the ultimate desire for their wellbeing, no matter the cost. The Christian love command instructs humans to live altruistically, but human nature makes it difficult to fulfill this duty. God gave humanity the perfect model of how to live out this command by becoming flesh.<sup>26</sup> If humans follow the Christian love command and rely on the exemplar of Jesus, they will be living within the framework of aesthetic altruism.

## Conclusion

In a world where it has become commonplace to explain any prosocial behavior as altruistic, it is important to carefully examine the definition. A multitude of attempts have been made to clarify the meaning of altruism and to categorize the many actions believed to be examples. Ramsey presented a taxonomy in which he separated prosocial behaviors into three forms of altruism. Most of the behaviors are, however, not altruistic at all. The new taxonomy presented in this paper is better equipped to classify prosocial interactions properly. It also helps to clarify

---

<sup>24</sup> op. cit. ref. 14

<sup>25</sup> Kurokawa, 2016

<sup>26</sup> Mahoney, 2010

that evolutionary processes promote the prosocial behaviors associated with kin

selection and reciprocity, while the Christian love command promotes aesthetic altruism.

### Literature Cited

- Berg, J., Dickhaut, J., & McCabe, K. (1995). Trust, reciprocity, and social history. *Games and Economic Behavior*, 10(1), 122-142.
- Birch, J., & Okasha, S. (2015). Kin selection and its critics. *Bioscience*, 65(1), 22-31.
- Brannan, D. K. & Gillett, C. (2005). Evolutionary explanation and the ideal of altruism: The incommensurability of the Christian love command. *European Journal of Science and Theology*, 1(1), 11-25.
- Carter, G. G., & Wilkinson, G. S. (2013). Food sharing in vampire bats: Reciprocal help predicts donations more than relatedness or harassment. *Proceedings of the Royal Society B*, 280(1753), 1-6. doi: 10.1098/rspb.2012.2573
- Carter, M. A., & Ellis, C. (2016). Work 'with' me: Learning prosocial behaviours. *Australasian Journal of Early Childhood*, 41(4), 106-114.
- Klein, S. (2014). *Survival of the nicest: How altruism made us human and why it pays to get along*. New York, NY: The Experiment, LLC.
- Kurokawa, S. (2016). Payoff non-linearity sways the effect of mistakes on the evolution of reciprocity. *Mathematical Biosciences*, 27963-70. doi:10.1016/j.mbs.2016.07.004
- LiveBeyond. (n.d.). Retrieved from: <http://livebeyond.org/vision/>
- Mahoney, J. (2010). Evolution, altruism, and the image of God. *Theological Studies*, 71(3), 677-701.
- Philips, R. C. (2016). Auguste Comte. *Salem Press Biographical Encyclopedia online*.
- Ramsey, G. (2016). Can altruism be unified?. *Studies in History and Philosophy of Biological & Biomedical Sciences*, 56, 32-38. doi:10.1016/j.shpsc.2015.10.007
- Ratnieks, F. L., & Wenseleers, T. (2008). Review: Altruism in insect societies and beyond: Voluntary or enforced?. *Trends in Ecology & Evolution*, 2345-52. doi:10.1016/j.tree.2007.09.013
- Ricard, M. (2013). *Altruism: The power of compassion to change yourself and the world*. New York, NY: Little, Brown and Company.