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## ALTRUISM IN BEHAVIOURAL, MOTIVATIONAL AND EVOLUTIONARY SENSE

### ABSTRACT

This paper discusses the relations between three forms of altruism: behavioural, evolutionary and motivational. Altruism in a behavioural sense is an act that benefits another person. It can range from volunteering to a charity and helping a neighbour, to giving money to a non-profit organisation or donating blood. People often dedicate their material and nonmaterial resources for the benefit of others to gain psychological, social and material benefits for themselves. Thus, their altruistic acts are driven by egoistic motivation. Also, the final goal of an altruistic act may be the increase in the welfare of a group or adherence to a certain moral principle or a social norm. However, at least sometimes, the welfare of others is the ultimate goal of our actions, when our altruistic acts are performed from altruistic motivation. In evolutionary sense, altruism means the sacrifice of reproductive success for the benefit of other organisms. According to evolutionary theories, behaviour which promotes the reproductive success of the receiver at the cost of the actor is favoured by natural selection, because it is either beneficial for the altruist in the long run, or for his genes, or for the group he belongs to. However, altruism among people emerges as a distinctly human combination of innate and learned behaviours. Not only do we benefit the members of our own group, but we are capable of transcending our tribalistic instincts and putting the benefit of strangers at our own personal expense as our ultimate goal.

### KEYWORDS

altruism, behaviour,  
motivation, gen-culture  
co-evolution.

## Introduction

The term altruism, which introduced by Auguste Comte, comes from the Latin and it means “for the other” (Kolm 2006). In its broadest sense altruism means promoting the interests of the other (Scott and Seglow 2007). There are three different usages of the term altruism in the literature of today: behavioural, motivational and evolutionary.

In a behavioural sense altruism is an act that benefits other persons from which there is no expectation of reward (Music and Wilson 2008). Thus, altruism in a behavioural sense is the close to prosocial behaviour, which “occurs when one acts in a manner that benefits another person or group of people” (Snyder and Dwyer 2013: 467). This action is intended to improve the situation of the person that receives help and is not done out of professional obligation (Bierhoff 2002). Altruistic

behaviour is costly for the one who performs it, since it takes time, effort, and often material resources to engage into activities beneficial for other individuals.

In the motivational sense, altruism is a motivational state with the ultimate goal of increasing another's welfare (Batson 2011; Elster 2006). It is opposite to egoism, which is a motivational state with the ultimate goal of increasing one's own welfare. An act beneficial to others can be performed because one truly cares about the well-being of the other, but it can also be undertaken with the final aim of increasing one's own well-being, or a group's welfare, but also to adhere to a moral principle or a social norm (Batson et al. 2002).

Finally, an evolutionary sense, altruism means the sacrifice of fitness (reproductive success) for the benefit of other organisms (Bowles and Gintis 2011; Simon 1983; Sober and Wilson 1998). An act can be altruistic in a motivational sense, but not in terms of evolution and vice versa (Sober and Wilson 1998). For example, being solely motivated by his own safety, an individual wants to make a fort (ibid). However, the fort provides everyone in the group with defence against predators. This individual is not altruistically motivated, but his action is altruistic from the evolutionary perspective, since it increases the reproductive success of the members of the group the actor belongs to.

This paper focuses on the three aspects of altruism and their relations. In the first section, the forms of altruistic behaviour and its various motives will be outlined, while the evolution of altruism will be examined in the second section.

## Altruistic Behaviour and Its Motives

Ann donates money to shelter for homeless. Omar pays for a language school his nephew attends. Steve gives money to a homeless person on the street. Mina babysits her friend's children. Jovana contributes to the medical treatment of a sick child she has heard about in the media. David volunteers his time at a local church. Sarah donates her blood to the local clinic. These and similar gestures, beneficial for the others and costly for the actor, are forms of altruistic behaviour.

All over the world, people give their material and non-material resources for the benefit of others (Butcher and Einolf 2017, Moody and Breeze 2016, Smith et al. 2016, Wiepking and Handy 2015). However, the way altruistic behaviour is channelled is not uniform. In some countries, there are high rates of giving to charitable and non-profit organisations, while in others, people support each other directly (Butcher and Einolf 2017; Ilchman et al. 1998; Jung et al. 2016; Wiepking and Handy 2015). Historical, cultural and political forces determining the predominant forms of altruistic behaviour in any society are out of the scope of this paper. Thus, when Ann donates money to a shelter for homeless, thus to an organisation, and when Steve gives directly to a homeless person, they are both performing altruistic acts towards strangers, with or without an intermediary organisation. This section focuses on behaviour of individual actors and motives that drive their actions.

To be motivated to do something requires that we have a desire to achieve a certain state and a belief about how to achieve that state (Sober and Wilson 1998). Motives are goal-directed psychological forces in a given situation (Batson et al. 2002; Batson 2011). We will examine each part of this definition.

Motives are goal-directed, which means that they urge us to achieve a desirable change in the experienced world. This desirable change in the experienced world might be tiny, such as having a sandwich (when feeling hungry), but it can also be of a greater magnitude, such as improving the living conditions of refugees. A goal may be, and most often is, consciously set. For example, Pitter's goal is to enjoy classical music and therefore he goes to a piano concert. However, we may act without really being aware of the goal we want to attain. Thus, the goal may be unconsciously set. For example, we internalise norms of appropriate behaviour in our society and behave in accordance with them, without really being aware of the goals of such behaviour.

Motives are psychological forces, meaning that they are desires that push us to attain the goal. To have a desire means wanting to have something or wishing for something to happen (Sober and Wilson 1998). The concept of desire does not necessarily include feelings and sensations, but they are sometimes accompanied by feelings. Mary may feel pity for a homeless person, and this feeling may induce a desire to help him. Alternatively, she might not feel empathy for his suffering, but she may think that it is her duty to help the needy, which then triggers a desire to help the beggar and give him some money.<sup>1</sup>

Finally, motives are not unidimensional, in a sense that whatever one does cannot be reduced to one motive. They are often different in different situations. Although Pit is motivated by his own welfare when negotiating a business contract, when he takes care of his sister's children while she is on a mindfulness course, his sister's well-being is his goal. Moreover, the same person, in relatively similar situations, may be moved by different motives. On one occasion Pit is motivated by his sister's well-being, on another he may be willing to take care of her children out of the pleasure he gets playing with them.

Goals can be instrumental or ultimate. While an instrumental goal is a means towards something else, an ultimate goal is an end in itself. For example, Susan's ultimate goal may be to gain a reputation for being a generous person and therefore, she donates to an organisation supporting the poor. Thus, the well-being of the poor is an instrumental goal, while gaining a good reputation is an ultimate goal here. In any given situation, we can have different goals, and thus various motives, which can complement or conflict with each other. Mina, for example, has conflicting motives. She wants to buy a new toy for her child, but at the same time, she wants to buy a toy for a child in an orphanage. Supposedly, she can only afford to buy one toy. Although she is aware that a child living in an orphanage would be better off with a new toy than her own child who already has a lot of things to play with, her motherly feelings prompt her to favour her own child. As another example, Jan participates in an activity of an informal group because he is concerned about the welfare of the group that he belongs to and at the same time, his own welfare. Thus, his motives are complementary.

Apart from goals, each action may also have unintended consequences. For example, Oliver's goal may be to increase the well-being of the homeless and because of that he volunteers with a shelter for the homeless. However, volunteering also

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1 This example is adapted from Sen (1977).

produces a feeling of joy and satisfaction. These sentiments are unintended consequences of the act of volunteering and not the ultimate goal in this case. However, on some other occasion, Oliver's goal may be to experience this feeling of satisfaction, and he volunteers purely for the pleasure this induces.

What kind of motives drive altruistic behaviour? The so-called 'altruism hypothesis' (Sober and Wilson 1998) maintains that people sometimes have altruistic motivation, meaning that one dedicates her material and non-material resources for the benefit of others because she really cares for them, sometimes even at the risk of significant harm to her own well-being. When the ultimate goal of our behaviour is the well-being of the other (individuals or group), then our motivation is altruistic. The welfare of others becomes goal that leads our action when we have affections towards someone (usually those dear to us), or when we feel sorry for the distress of the other, or when we perceive ourselves strongly linked to others through a shared humanity (Batson 2011; Kolm 2006).

When we feel strongly about someone, when we love a person, we want what is best for her, and we set her welfare as a goal that leads our actions. Affection towards family members, friends and colleagues may influence us to help them, to give our support in various ways (Kolm 2006). In the same way that we react to people we know, we can also have emotions towards unknown individuals. When we see a homeless person on the street in ragged clothing on a cold winter day, we may feel sorry for him. These emotions urge us to act and we give him money. In this situation, altruism is induced by empathy for the suffering of another. Batson defines empathy as the "other-oriented emotion elicited by and congruent with the perceived welfare of someone in need" (Batson 2011: 11). According to Batson, empathy involves feelings towards another such as "feeling sympathy for, compassion for, sorry for, distress for, concerned for, and so on" (ibid).<sup>2</sup> These feelings may prompt us to act in order to help a person who we perceive is in need.

Thus, improving the well-being of distressed and vulnerable individuals is often prompted by empathic concern (Batson 2011; Kolm 2006; Marsh 2016; Oliner and Oliner 1988; Schokkaert 2006; Sen 1977). This is shown in experiments (Batson 2011), but also in natural settings (Oliner and Oliner 1988). In their analysis of motivation for rescuing Jews during the Second World War, Oliner and Oliner (1988) found that "an empathic reaction aroused more than a third (37%) of rescuers to their first helping act" (ibid: 189). A direct encounter with a person in distress was sometimes enough to provoke helping in the observer. As well as through a direct encounter, empathic feelings can be aroused through indirect contact, such as when we see on television the sufferings of those injured during an earthquake, or hear stories depicting the misfortunes of others.

Apart from empathic concern, one can set the welfare of others as the ultimate goal out of a particular world view, the so-called altruistic perspective - perception of oneself as strongly linked to others through a shared humanity (Monroe 1996). Such a perspective maintains that "each individual is linked to all others and to a world in which all living beings are entitled to certain humane treatment merely by virtue of being alive" (Ibid: 206). When one has this way of seeing the world,

<sup>2</sup> The term *empathy* has various definitions even within psychology (See Batson 2011). Here I will use Batson's definition.

setting the welfare of others as an ultimate goal results from the recognition that on the one hand the actor is human and therefore required to act in a certain way, and on the other that a person in need is human and therefore entitled to certain treatment. It is interesting to consider how some people came to have such a perspective, while others do not. It might be innate, but more plausible is that it is gained through socialisation and learning from their parents and peers.

Another study on heroic acts of rescuing Jews during WWII has shown that all rescuers who participated in the study had an altruistic perspective (ibid). When facing the person in need, rescuers had a feeling that they had no choice concerning whether to help, even if it meant risking their lives for strangers. Many reported that they did not even think, but reflexively helped. Such feelings and reactions were firmly entrenched in their perspective on themselves in relation to others which gives rise to an instinctive response that guides their actions in saving others and makes even life and death decisions nonconscious (ibid). It is interesting that those who endangered their own life and the lives of family members to help a stranger believed that they were acting normally, that there was nothing extraordinary about their behaviour. Having such expectations about what constitutes as normal behaviour may explain why rescuers so often have a feeling that their behaviour is reactive, not the result of a conscious process. Not only in such extraordinary situations, but also in everyday life those who have an altruistic perspective set goals to increase the welfare of others, known and unknown, and dedicate their resources to reach such goals.

However, this is only a part of the picture about the motives behind the altruistic acts. Sometimes we benefit others to gain psychological, social and material benefits for ourselves, when our motivation is egoistic (Batson et al. 2002; Andreoni 1990; Bekkers and Wiepking 2011a; Bekkers and Wiepking 2011b). Also, the ultimate goal of an altruistic act may be the increase in a groups' welfare, when she is driven by collectivism (Batson et al. 2002). Finally, we often act altruistically towards others in order to adhere to a certain moral principle or a social norm. Such motivation is called principlism (ibid).

There is plenty of evidence that helping others produces positive psychological consequences (rewards) which are called *empathic joy* also known as *the joy of giving* or *warm glow effect* (Andreoni 1990; Bekkers and Wiepking 2011a). There are several possible explanations why people may have psychological rewards from altruistic acts. They may alleviate feelings of guilt, or feel good for acting in line with a social norm, or feel good for acting in line with a specific (altruistic) self-image (Bekkers and Wiepking 2011a). However, these psychological benefits may just be *unintended consequences* of altruistic behaviour and not the main motivational factor. The fact that a psychological benefit can be foreseen does not mean that achieving it was the goal of the action (Marsh 2016).

Another egoistic motive may lie in obtaining *social benefits* (Kolm 2006; Bekkers and Wiepking 2011a). For example, Linda helps a colleague in order to increase his *positive opinion* and build a *good reputation* about her rather than because she truly cares for the colleague's well-being. Since giving is seen as a positive thing to do, people who give are respected by their peers. Numerous studies show that a good reputation or a positive opinion is a very important factor that induces giving

(Bekkers and Wiepking 2011a). Some studies find that people who are asked to give by a relative or a friend donate a larger percentage of their income (Bekkers and Wiepking 2011b). For example, people generally prefer their donations to be known about by others. Thus, face-to-face solicitations are more effective than solicitations made over the telephone (ibid).

Altruistic behaviour may also be induced by *material benefits* (Bekkers and Wiepking 2011a). For example, donors to organisations of sport and recreation may benefit from using the services of these organisations. Also, one may volunteer in order to increase the chances of getting a job or for the attainment of greater success in an existing job.

Apart from altruistic and egoistic motivation, the ultimate goal of altruistic behaviour may be the increase in *the welfare of the group to which one belongs*. One can perform acts for the benefit of one's neighbourhood, colleagues, basketball club, nation, etc. A person's willingness to participate in both informal groups and formal organisations in order to address certain needs within a community may be driven by this motive called *collectivism*. Although, as a member of the group, one enjoys the benefit of her act, it would be in her narrow self-interest to free-ride, thus collectivism is different from egoism. It is also different from altruism since the actor cannot be excluded from the benefits of her act.

Finally, the ultimate goal of altruistic behaviour can be adherence to a certain principle or a norm, when motivation is called *principlism* (Batson et al. 2002). One can give her material or non-material resources for the benefit of others, not because she empathises with their situation, or has an altruistic perspective of a bound humankind, nor does she give to gain some sort of personal benefits or to contribute to the community, but because it is the *right course of action*. *Principles* may be moral and social (Kolm 2006). Moral norms address relations between people, they regulate social life and in a broader sense of the term, they are *social*. However, there is a difference between the two. While *social norms* may differ between societies, *moral norms* claim to be universal. In addition, the two may be in conflict in a certain society. To understand better the distinction between the two norms, we can look at the example of the rescuing of Jews by fellow citizens in Poland during WWII. In pre-Second World War Poland, there was animosity towards the Jews, and the predominant *social norm* would not induce giving to Jews. However, the request for universality of *moral norms* and treatment of all people as equals may, even in such societies, induce helping people from deprived groups, which is noticed in the case of the Poles who rescued Jews during the War (Oliner and Oliner 1988). The above-mentioned empirical study of Oliner and Oliner shows that most rescuers (52 %) performed their first act of helping because they felt an obligation to a *social referent group* (*social norm*), while 11% of rescuers were inspired to action by moral principles (*moral norm*).

In short, though often moved by other kinds of motives (egoism, collectivism and principlism), at least sometimes, people dedicate their material and non-material resources for the benefit of others with the ultimate goal to increase the welfare of that other, when altruistic behaviour comes from altruistic motives. A question that arises is how we have evolved to be capable of altruistic acts and altruistic motives.

## Evolution of Altruism

According to Darwin's theory of natural selection, living beings produce more offspring than the limited resources can support and therefore there is a struggle for existence. Individuals in a population have different genes, traits and behaviours (variants). Variants which are best adapted to their environment (conditions of life) are more likely to survive and reproduce, which is known as the survival of the fittest. Variation is heritable, and the offspring of survivors resemble their parents. Thus, variations of individuals who are more likely to survive and reproduce spread through a process of natural selection. In short, the inherent dynamic forces of nature allow only the fittest, the most adaptable, to survive and prosper.

Altruism in evolutionary terms means the sacrifice of fitness for the benefit of other organisms (Bowles and Gintis 2011; Simon 1983). The acts of those who benefit others at a cost to themselves, do not seem to be in line with the theory of natural selection. Here, cost is defined as the degree to which behaviour reduces the reproduction of the genes of the individual performing the altruistic act ("the altruist") and benefit is the degree to which the behaviour increases the rate of reproduction of the genes of the recipient. Nevertheless, organisms do sacrifice their fitness for the benefit of others. How has such behaviour evolved?

Kin altruism and reciprocal altruism can be explained by the theory of natural selection (Dawkins 2006; Richerson and Boyd 2005; Trivers 1971). Altruistic behaviour towards those with whom we share genes is called kin altruism. Altruism toward kin can be favoured by selection because of the genetical similarity between kin. Making a sacrifice for a child favours the survival and reproduction of one's genes. Thus, an altruistic act towards one's kin, despite the cost borne by the altruist, benefits the reproduction of his gene set. However, for selection to favour kin altruism, benefits should be higher than costs. Evolutionary biologist Hamilton made a calculus of the cost-benefit ratio necessary for the kin selection to work (known as Hamilton's rule). Siblings share half of their genes and one can help the other sibling as long as the benefits are twice the costs, while more-distant relatives require a higher benefit-cost ratio. Apart from humans, kin altruism is common among many other organisms, an example of which is a suicidal barbed sting of the honeybee worker. However, unlike other species, humans often behave altruistically towards non-relatives.

Altruistic behaviour that can be expected to be reciprocated also fits well the theory of natural selection. In small groups, when the chances for interactions between the same pairs of individuals are high, natural selection can favour altruistic behaviour (Trivers 1971). However, certain conditions should be met. First, the cost of an altruistic act is lower than its benefit. Then, the chances that the two individuals will interact in the future are high and the altruist expects that the receiver will reciprocate. If a receiver does not reciprocate an altruist responds to this by denying him all altruistic acts in future. Thus, free riding has negative effects on a free rider's life and when the benefits of lost altruistic acts are higher than the costs of reciprocating, then selection favours altruists to free-riders. In other words, under certain conditions, natural selection favours reciprocal altruistic behaviour because in the long run it benefits the organism performing the act (ibid).

We argued that altruistic behaviour towards one's kin and towards people from whom one may expect a reciprocal activity is consistent with the theory of natural

selection. However, people help complete strangers, and they also practice activities for the benefit of others when it is not likely that their behaviour will be reciprocated. In such cases, if the individual were to refrain from helping others his fitness or other payoffs would be higher. Why has such behaviour evolved?

As it has already been pointed out, parental care has a genetic base. The question is whether parental nurturing may be the origin of altruism towards strangers. Darwin pointed out that sympathy for others is linked to instinctive love based on parental and filial affections (Batson 2011). Thus, caring for others is an extension of kin altruism. This argument could be found in psychological theories a century ago, when it was abundant (*ibid*). Today, in line with this, Pinker argues that care for those with whom we share genes is instinctively triggered and extended to our fictive kin, such as brothers in arms, occupational and religious brotherhoods, crime families, fatherlands, etc. (Pinker 2012). In other words, artificial families are created through metaphors and myths and thus altruistic behaviour is extended to this fictive kinship. However, from an evolutionary point of view, such ‘extension’ reduces one’s fitness since there are no shared genes with the fictive kin. Then, why does it not get ‘weeded out’? The explanation of how we evolved to become a species whose members help one another lies in the gene-culture coevolution and cultural-group selection (Bowles and Gintis 2011; Green 2013; Hodgson 2013; Richerson and Boyd 2005).

In order to regulate altruistic and cheating tendencies in individuals, a complex psychological system has evolved (Bowles and Gintis 2011; Green 2013; Trivers 1971; Richerson and Boyd 2005). These psychological mechanisms are often called social instincts (Richerson and Boyd 2005). Strong positive and negative emotions regulate our interactions with others. We care about our fellow human beings and sympathise with their misfortunes. When we provide help to those in need we often feel satisfaction and other positive emotions. Shame and guilt are emotions experienced when we have failed to provide support for those in need or when we take a free ride. We recognise other individuals and remember how we have treated and been treated by them, feeling gratitude to those who have helped us and anger towards those who have exploited us. Our negative reactive emotions such as anger motivate us to punish uncooperative individuals. We are willing to reward those who cooperate and punish people who do not. We do this even when we do not gain anything from this and even when the costs are higher than the benefits.<sup>3</sup>Our self-esteem and our reputation depend on what others think of us, where altruistic behaviour is praised and cheating despised. Finally, we perceive the social world as divided into competitive groups and we have predispositions to learn and internalise norms of the group we belong to. These “social instincts” allow the individual to reap the psychological benefits of an altruistic exchange and it also protects him from free-riders.<sup>4</sup> How have these emotions and traits evolved?

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3 *Altruistic (moralistic) rewarding* – a predisposition to reward others for cooperation and *altruistic (moralistic) punishment* – a propensity to impose sanctions on those who violate norms and omit to reciprocate are well documented in many experiments (Fehr and Fischbacher 2003).

4 It should be noted that these psychological benefits are not the reasons of an altruistic act. They are rather its by-products.



Our psychological capacities and dispositions are the products of a gene-culture coevolution. A coevolution of genes and culture is dynamic whereby genes affect cultural evolution and culture affects genetic evolution (Richerson and Boyd 2005).<sup>5</sup> Here culture is defined as information (any kind of conscious or unconscious mental state) that affects individuals' behaviour, which is acquired through social learning (ibid). Words like idea, knowledge, belief, value, skill, and attitude are usually used to describe this information. Culture is acquired, stored and transmitted by a population (group) of individuals. As with other species, humans acquire knowledge through genetic transmission and individual learning, but unlike other animals, humans also learn from one another, which is known as the process of social learning or cultural transmission (Hodgson 2013; Richerson and Boyd 2005). People in culturally distinct groups behave differently, mostly because they have acquired different skills, beliefs, and values. These differences persist because people learn from their parents, other adults and their peers.

The concept of gene-culture coevolution implies that a culture is a part of the environment where genes are selected, while genetic bases influence the cultural evolution. Although it is intuitively conceivable that the way we think and behave is shaped by our biology, that is our genes, it is less easy to imagine that our culture influences our genes. How does this work? An example of gene-culture coevolution is the evolution of adult lactose digestion (Richerson and Boyd 2005). Milk has always been food for mammal babies. Since lactose only occurred in mother's milk, adult mammals had no need for the enzyme necessary to digest lactose. The majority of people can digest milk as infants but not as adults. However, some human adults can digest lactose. This is because they possess a certain gene that controls adult lactose digestion. This gene evolved as a result of an adaptation to the habit of milk consumption. People have kept cows and consumed fresh milk in some parts of the world (e.g. northwest Europe) for a long time. Calculations indicate that there has been plenty of time for this gene to evolve since the origin of dairying (ibid). Once it is spread it encouraged even more milk consumption.

As with the culture of milk consumption and lactose digestion, a gene-culture coevolution explains the origins of altruistic behaviour found among humans. As it has already been pointed out, humans, like other organisms, behave altruistically towards their kin and in small groups when the reciprocation of the altruistic act is expected, but unlike other organisms, people often act altruistically towards complete strangers. In order to understand the process by which natural selection favours altruistic behaviour among unrelated humans, we need to introduce the concepts of multilevel selection and group selection. We can think about natural selection occurring at a series of levels: among genes within an individual, among individuals within a group, and among groups (Richerson and Boyd 2005). This process was introduced by biologist Price, who described the process of multilevel selection through a mathematical formalism called the Price covariance equation. Using Price's method, kin selection is conceptualised as occurring at two levels: selection within family groups favours free-riders, because defectors always do

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<sup>5</sup> In biology, the term *coevolution* refers to “systems in which two species are important parts of each other's environments so that evolutionary changes in one species induce evolutionary modifications in the other” (Richerson and Boyd 2005: 192).

better than other individuals within their own group, but selection among family groups favours groups with more helpers, because each helper increases the average fitness of the group (*ibid*).

Group selection is a mechanism of evolution when natural selection acts at the group level. In this concept, groups are adaptive and those, which better adapt to their environment reproduce and prosper, while those that do not adapt disappear.<sup>6</sup> Group selection favours traits that maximise the relative fitness of groups, rather than that of individuals (Sober and Wilson 1998). For group selection to work, there is a need for a conflict and a heritable variation between groups with the corresponding variation in fitness (Richerson and Boyd 2005; Sober and Wilson 1998). There are two concepts of group selection: genetic group selection and cultural group selection. Although the group is the object of selection in both concepts, they differ because they focus on separate levels and mechanisms of inheritance (Hodgson 2013). In the genetic group, genes are causes of variation, while cultural and informational mechanisms (such as individual habits and social customs) are the sources of variation in cultural group selection (*ibid*). In order for the genetic group selection to work, there is a need for the restriction of intergroup migration and the limitation of genetic mixing. When variation between groups is based on genetic material, then even very small amounts of migration are sufficient to reduce the variation. Although evidence on the intergroup migration among early humans is lacking, based on the evidence among primates, we can conclude that migration between groups occurred (*ibid*). This makes genetic group selection an unimportant force in evolution (Richerson and Boyd 2005). However, migration between culturally different groups does not result in a decrease in between-group variation. This is due to the conformist bias – a propensity to do what the majority does and altruistic (moralistic) punishment – inclination of group members to punish individuals who violate group norms (*ibid*). These two mechanisms, which evolved to assure group cohesion, induce migrants to adhere to the rules of behaviour (norms) in the group they migrated to.

Our Pleistocene ancestors lived in communities where different groups competed for material sources. Different groups adapted to their specific environments, which resulted in behavioural variations among groups. These variations are heritable since the way people think and behave is acquired through social learning. Cultural differences affected the group's competitive ability. Groups whose members were predisposed to cooperate and uphold the norms of sharing and caring for each other tended to survive and expand relative to other groups (Bowles and Gintis 2011; Hodgson 2013; Green 2013). An environment of between-group conflict favoured the evolution of the social instincts to assure within-group cooperation (Richerson and Boyd 2005). Docility, the propensity to behave in socially approved ways, became the basis for altruism in society (Simon 1983). Group selection favoured the evolution of social instincts, which bring a competitive advantage to groups, such as fairness and sympathy. Individuals who did not possess these social instincts were denied the goods of the group and mating partners.

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<sup>6</sup> It should be noted that a disappearance of a group does not necessarily mean that all its members are killed. They are rather assimilated, absorbed by the other, more successful group.

It has been argued that, through the process of gene-cultural coevolution, humans have developed psychological mechanisms and constructed social norms that have secured high levels of within-group cooperation, which in turn has favoured the survival of the group as an entity. It should be noted that human genetic features have changed very little in thousands of years, while culture evolves at a much faster pace (Hodgson 2013). Our innate social psychology is probably the same as that of people in Pleistocene (2,588,000 to 11,700 years ago). Evolution in our culture, of the way we think and behave, happens at much faster paced than the evolution in our genes. This is exactly why, according to the evolutionary biologists, culture emerged in the first place. Culture arose because it can evolve adaptations to a changing environment that could not be done by genes alone.

The same psychological traits and social norms that have made us predisposed to favour group benefits over our own interests, often prompt us to favour our group members' or our group's interests over the benefits of the members of other groups. This is why we are often parochially altruistic or tribalistic (Green 2013). However, we do benefit individuals outside of our social groups, although perhaps not to the same extent as we favour our own group members. This is possible because our behaviour is led by both emotions and reasoning (Green 2013). On the one hand, we have emotions. They are automatic processes that, based on the lessons of past experience, exert pressure on behaviour. This past experience comes in three different forms. First, our emotions are shaped by our genes, then by cultural learning, and finally by personal experience. On the other, we are capable of reasoning. Reasoning involves the conscious application of decision rules. When we behave based on reasoning we know what we are doing and why. We have conscious access to the rules on which we base our decisions. Although our emotions often prompt us to favour our group members, regardless of whether the group is perceived in terms of ethnic origin or social status, since we are capable of reasoning and imagining we can go beyond the limits of one's group and engage in activities which benefit complete strangers.

## Conclusion

This paper has argued that altruism in a behavioural sense is an act that benefits another person, while it is altruistically motivated when the ultimate goal of such act is the welfare of that other. In evolutionary sense, altruism means the sacrifice of fitness for the benefit of other organisms.

According to the evolutionary theories of altruism, behaviour which promotes the reproductive success of the receiver at the cost of the altruist is favoured by natural selection, because it is either beneficial for the altruist in the long run, or for his genes, or for the group he belongs to. Thus, in line with Trivers, it can be argued that "models that attempt to explain altruistic behaviour in terms of natural selection are models designed to take the altruism out of altruism" (Trivers 1971: 35).

Indeed, people often dedicate their material and nonmaterial resources for the benefit of others to gain psychological, social and material benefits for themselves. Also, the ultimate goal of an altruistic act may be the increase in the welfare of a group or adherence to a certain moral principle or a social norm. In other words, altruistic behaviour can be driven by various motives.

However, altruism among people emerges as a distinctly human combination of innate and learned behaviours. Not only do we benefit the members of our own group, but we are capable of transcending our tribalistic instincts and putting the benefit of strangers at our own personal expense as our ultimate goal. Thus, at least sometimes, we act altruistically from altruistic motivation.

## References

- Andreoni, James (1990), "Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving", *The Economic Journal* 100(401): 464–477.
- Bekkers, Rene and Wiepking, Pamala (2011a), "A Literature Review of Empirical Studies of Philanthropy: Eight Mechanisms That Drive Charitable Giving", *Nonprofit and Voluntary Sector Quarterly* 40 (5): 924–973.
- . (2011b), "Who Gives? A Literature Review of Predictors of Charitable Giving. Part One: Religion, Education, Age and Socialisation", *Voluntary Sector Review* 2(3): 337–365.
- Batson, C. Daniel (2011), *Altruism in Humans*, Oxford: Oxford University Press.
- Batson, C. Daniel, Nadia Ahmad and Jo-Ann Tsang (2002), "Four Motives for Community Involvement", *Journal of Social Issues*, 58 (3): 429–445.
- Bierhoff, Hans Werner (2002), *Prosocial Behaviour*, Hove: Taylor & Francis Group.
- Bowles, Samuel and Gintis, Herbert (2011), *A Cooperative Species: Human Reciprocity and Its Evolution*, Princeton: Princeton University Press.
- Butcher, Jacqueline and Einolf, J. Christopher (eds.) (2017), *Perspectives on Volunteering: Voices from the South*, Cham: Springer International Publishing AG.
- Dawkins, Richard (2006), *The Selfish Gene*, Oxford: Oxford University Press.
- Elster, Jon (2006), "Altruistic Behaviour and Altruistic Motivations" in Serge-Christophe Kolm and Jean Mercier Ythier (eds.), *Handbook of the Economics of Giving, Altruism and Reciprocity*, Volume 1, Amsterdam: Elsevier, pp. 183–206.
- Green, Joshua (2013), *Moral Tribes*, London: Atlantic Books.
- Hodgson, Geoffrey (2013), *From Pleasure Machines to Moral Communities: An Evolutionary Economics Without Homo Economicus*, Chicago: The University of Chicago Press.
- Fehr, Ernst and Urst Fischbacher (2003), "The Nature of Human Altruism", *Nature*, 425(23): 785–791.
- Ilichman, Warren, Stanley Katz and Edward Queen II (eds.) (1998), *Philanthropy in the World's Traditions*, Bloomington: Indiana University Press.
- Jung, Tobias, Susan D. Phillips, Jenny Harrow (eds.) (2016), *The Routledge Companion to Philanthropy*, London: Routledge.
- Kolm, Serge-Christophe (2006), "Introduction to the Economics of Giving, Altruism and Reciprocity" in Serge-Christophe Kolm and Jean Mercier Ythier (eds.), *Handbook of the Economics of Giving, Altruism and Reciprocity*, Volume 1, Amsterdam: Elsevier, pp. 4–114.
- Marsh, Abigail (2016), "Neural, Cognitive, and Evolutionary Foundations of Human Altruism", *Wiley Interdisciplinary Reviews: Cognitive Science* 7(1): 59–71.
- Monroe, Kristen Renwick (1996), *The Heart of Altruism: Perceptions of Common Humanity*, Princeton: Princeton University Press.
- Musick, Marc and Wilson John (2008), *Volunteers: A Social Profile*, Bloomington: Indiana University Press.
- Oliner, Samuel and Pearl Oliner (1988), *The Altruistic Personality: Rescuers of Jews in Nazi Europe*, New York: The Free Press.
- Pinker, Steven (2012), "The False Allure of Group Selection", *Edge*, 18.06.2012, [https://www.edge.org/conversation/steven\\_pinker-the-false-allure-of-group-selection](https://www.edge.org/conversation/steven_pinker-the-false-allure-of-group-selection), as of 23 January 2014.

- Richerson, Peter and Robert Boyd (2005), *Not by Genes Alone: How Culture Transformed Human Evolution*, Chicago: The University of Chicago Press.
- Schokkaert, E. 2006, The empirical analysis of transfer motives in Handbook of the Economics of Giving, Altruism and Reciprocity in Serge-Christophe Kolm and Jean Mercier Ythier (eds.), *Handbook of the Economics of Giving, Altruism and Reciprocity*, Volume 1, Amsterdam: Elsevier, pp. 128–176.
- Scott, Niall and Seglow, Jonathan (2007), *Altruism*, Open University Press, Berkshire: McGraw-Hill Education.
- Sen, Amartia (1977), “Rational Fools: A Critique of The Behavioural Foundations Of Economic Theory”, *Philosophy and Public Affairs*, 6(4): 317–344.
- Simon, Herbert (1983), *Reason in Human Affairs*, Stanford: Stanford University Press.
- Smith, David Horton, Robert Stebbins and Jurgen Grotz (eds.) (2016), *The Palgrave Handbook of Volunteering, Civic Participation, and Nonprofit Associations*, Basingstoke: Palgrave Macmillan.
- Snyder, Mark and Patrick C. Dwyer (2013), “Altruism and Prosocial Behaviour”, in Theodore Millon, Melvin Lerner and Irving Meiner (eds), *Handbook of Psychology, Volume 5: Personality and Social Psychology*, New Jersey: John Wiley & Sons, Inc., pp. 467–485.
- Sober Elliott and David S. Wilson (1998), *Unto Others: The Evolution and Psychology of Unselfish Behaviour*, Cambridge: Harvard University Press, Cambridge.
- Trivers, Robert L. (1971), “The Evolution of Reciprocal Altruism”, *The Quarterly Review of Biology* 46(1): 35–57.
- Wiepking, Pamala and Femida Handy (eds.) (2015), *The Palgrave Handbook of Global Philanthropy*, Basingstoke: Palgrave Macmillan.

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## Altruizam u bihevioralnom, motivacionom i evolutivnom smislu

### Apstrakt

Ovaj rad govori o odnosima između altruizma u bihevioralnom, evolutivnom i motivacionom smislu. Altruizam u smislu ponašanja je radnja u kojoj akter snosi trošak (materijalni ili nematerijalni) a od koje benefit ima druga osoba. Može da se kreće od volontiranja za neprofitne organizacije i pružanja pomoći osobama u nevolji, do davanja novca u dobrotvorne svrhe ili doniranja krvi. Ljudi često posvećuju svoje materijalne i nematerijalne resurse u korist drugih kako bi stekli psihološke, socijalne i materijalne koristi za sebe. Tada su njihova altruistična dela vođena egoističnim motivima. Takođe, krajnji cilj altruističnog čina može biti povećanje blagostanja grupe ili poštovanje određenog moralnog principa ili društvene norme. U evolucionom smislu, altruizam znači žrtvovanje reproduktivnog uspeha u korist drugih organizama. Prirodna selekcija favorizuje ovakvo ponašanje kada je ono ili korisno za altruistu na duži rok, ili za njegove gene, ili za grupu kojoj pripada. Međutim, altruizam među ljudima se javlja kao jedinstvena kombinacija urođenog i naučenog ponašanja. Ne samo da postupamo s ciljem povećanja sopstvenog blagostanja i blagostanja članova grupe kojoj pripadamo, već često postupamo u korist potpunitih stranaca, imajući kao krajnji cilj njihovo blagostanje, kada naše altruistično ponašanje proističe iz altruistične motivacije.

**Ključne reči:** altruizam, ponašanje, motivacija, koevolucija gen-kultura.