

Are we capable of being altruistic?

Third Prize – 3rd Year Undergraduate Category

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1. INTRODUCTION

The concept of homo economicus suggests that people are able to make fully rational decisions to maximise their own utility, and are generally unconcerned with the utility of others. In other words, we are self-interested beings. “It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest,” (Smith 1904). This opposes the notion of altruism, which is to behave in a manner that benefits others at a cost to the altruist (Jaffe 2002). Economists are skeptical as to whether humans are capable of altruism, and many experiments have been conducted to prove/disprove its existence. The purpose of this paper is to challenge actions that appear altruistic, and convey reasoning as to why this behaviour may not necessarily be derived from altruism at all.

2. THE DICTATOR GAME

The Dictator Game is one used in experimental economics to provide evidence of altruism. The dictator is endowed with X amount of currency, and has the opportunity to transfer an amount Y to an anonymous recipient. Y can be any amount between and including the entire

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endowment X and 0 ($X \geq Y \geq 0$). The game ends once the dictator has chosen how much, if any, currency to send to the recipient. The dictator will achieve a payoff equal to $X - Y$, whilst the recipient receives a payoff equal to Y . Assuming that players are rational and self-interested, it is predicted that Y will be equal to zero, since the dictator will choose to maximise their own utility by keeping the whole endowment.

A UEA classroom experiment of the dictator game conducted in a lecture proved otherwise. On average, the dictators sent 31% of the initial endowment to the recipients.¹ The findings of the small classroom experiment were consistent with much larger studies (Engel 2010). Initially it would seem entirely reasonable to suggest that dictators that send positive amounts are displaying altruism, but further investigation may challenge this thought. People do not derive utility from money alone; there are other factors involved. Guilt has a powerful influence in the dictator game. Although participants may wish to keep the entire endowment for themselves, they feel a sense of guilt if they do not transfer an amount that they believe is fair. Therefore the dictator's payoff should include ' α ' which represents the cost of guilt if the outcome is unfair.² A revised version of the dictator's payoff should equal $X - Y - \alpha$. This demonstrates that people may only be giving to reduce the burden of guilt on themselves, and maximise their own utility by giving what they deem is a fair amount. Although the dictator considers the other player in their decision, they have no interest in maximising the recipient's utility.

It is also believed that the 'experimenter effect' can lead people to giving positive amounts in the dictator game. This is where the participants' behaviour is influenced by the experimenter knowing their decisions. The existence of the "experimenter effect" was proven by conducting a double-blind version of the dictator game, where the experimenter is unable to match the decisions to specific individuals (Hoffman *et al.* 1996).

¹ Results from the classroom experiment appear in the appendix.

² An outcome that is deemed fair differs across the population.

3. CHARITY

Charity is an area that seems entirely plausible to be considered as altruistic. Giving money or your time to a complete stranger or a cause whilst receiving nothing in return appears to fit the definition of altruism. The “warm glow” theory may provide another explanation (Andreoni 1990). If people were purely altruistic, they would care only that a charitable organization raised their desired total of money, irrelevant of who donated it. This means that an individual will be indifferent between donating a pound to charity, and someone else donating a pound to the same charity (Hernández-Murillo & Roisman 2005). This is not the case in reality because donors get more satisfaction from giving directly than knowing the same amount of money was still going to the charity, even if this is from the individual’s own tax contributions (Steinberg 1987). In return for giving directly, they receive satisfaction in the form of a “warm glow”. Although the satisfaction is derived from helping someone else, at least part of the reason for giving is to increase one’s own utility.

The public recognition associated with giving may influence people to donate, whilst certain situations make people feel obliged to give. Consider the following example³: A neighbour’s child knocks on your door and asks you to sponsor them for a fun-run they are completing in aid of “The British Hedgehog Preservation Society”. Whether or not you feel you would like to support the charity, you may feel obliged to do so with the child smiling up at you clutching a sponsorship form. You may dread the thought of the child going home to their parents and saying, “Mr Smith at no. 44 refused to sponsor me”, branding you the Scrooge of the street. You may be even further persuaded when looking down at the sponsorship form you observe that everyone else in the street seems to have donated, and therefore feel obliged to conform. Without the child knocking on your door, you may never have donated to the cause, even if you were aware of it. If this is the case then the donation is not through altruism, but to prevent the cost of being branded tightfisted by your neighbours. You are willing to incur a monetary cost in order to prevent your reputation in the neighbourhood from being tarnished.

³ This is a purely fictional example aimed only to suggest an explanation of people’s behaviour when donating, and in no way reflects the worthiness of the British Hedgehog Preservation Society.

4. BLOOD & ORGAN DONATION

Blood and organ donations appear to be entirely altruistic actions. Donors usually have no contact with the recipient of their blood or organ(s), in fact it is almost always the case that the donor and recipient's anonymity is kept.⁴ Therefore it is impossible for a donor to receive anything in return. This is the case in the UK; the US has a system in place in which donors are able to give blood for a monetary payment in return. Richard Titmuss (1970) studied the effect to the supply of blood of offering monetary incentives to donors. He suggested that introducing monetary incentives caused a 'crowding out' effect, in which the altruistic motivations to give blood were diminished, causing supply to fall. Other negative effects are associated with offering payment to blood donors, such as adverse selection. The monetary incentive attracts people whose primary motivation to donate is the cash payment. These can often be donors who are more desperate for money such as drug addicts and alcoholics; but can also include carriers of diseases including hepatitis or malaria. Since there is imperfect information in this transaction, high-risk donors can often conceal their addiction or disease and may also donate too frequently. This leads to a decline in the quality of blood collected.

In the UK, small incentives are used to nudge donors towards giving blood. Although it is not a legislative requirement, many businesses allow their workers to take a few hours of paid leave in order to donate.⁵ The NHS Blood and Transplant service runs a 'Donor Award Scheme' in which donors receive token awards upon giving a significant number of donations (25, 50, 100 etc.) These awards include cards, key fobs and certificates that act as small trophies. This enables donors to advertise the fact that they give blood simply by attaching a key fob to their keys. It could therefore be argued that donors give blood not only through altruism, but also to gain respect amongst their peers. If the Donor Award Scheme had no influence on the supply of blood, it would not be economically viable to distribute these awards. The influence of non-monetary incentives is further explored by Neckermann & Frey (2008).

⁴ Donor and recipient are only aware of each other's identity if the donor has specified a friend or family member who is in need of a transplant or transfusion.

⁵ In 2009, 16% of all blood donated came from workplace donations and included 1553 employers.

(Source: *Smithers, R. (2010) If you only do one thing this week ... donate blood – at work if you can, The Guardian, 17th May, Date accessed: 25/02/12, <http://www.guardian.co.uk/money/2010/may/17/donate-blood-work>)*

A method to increase organ donation recommended by the Nuffield Council on Bioethics is for the NHS to offer free funerals to those who sign the organ donor register. This policy has been met with some opposition by people who believe organ donations should be purely altruistic and not influenced by other factors that could exploit those in poverty.⁶ The fact that 29%⁷ of UK citizens are registered organ donors under the current system suggests that many people are altruistic, and do not require some form of incentive to become donors.

5. GOOD DEEDS

Every day many of us will do good deeds for one another. By good deeds I mean actions such as helping an elderly person to cross the road, giving up your seat on public transport or holding the door open for the person behind you. These actions appear altruistic, but in some cases this may be an illusion. Many good deeds are also part of social etiquette, and are consequently expected by society. Whilst on public transport, whether or not you wish to give up your seat for someone less able, you may feel obliged to do so by the other passengers. Therefore you may give up your seat to prevent other passengers from looking at you unfavourably. Consider also the case of holding the door open for the person behind you; a true altruist should expect nothing in return. However, I would suggest that the majority of people expect a 'thank you' or some appreciative gesture, and would hope that the individual would return the favour should the situation be reversed. Although these expectations are small, this behaviour can be acknowledged as reciprocal altruism (Trivers 1971). This is because the individual is expecting something in return, even if it is just a thank you. If the same situation is repeated and no gratitude was shown in the first instance, the reciprocal altruist will not hold the door open again.

Similar behaviour can be observed in nature. Wild vampire bats are known to share food with unrelated bats by regurgitating blood. Help is given to those bats that return without food.

⁶ BBC News, "*Viewpoint: Should organ donors get free funerals?*", 11/10/11, Date accessed: 25/02/12, <http://www.bbc.co.uk/news/magazine-15253928>

⁷ Organ Donation, "*One in four of those waiting for a kidney transplant are Black or Asian*", 10/03/11, Date accessed: 25/02/12, http://www.organdonation.nhs.uk/ukt/newsroom/news_releases/article.jsp?releaseld=264

It has been discovered that vampire bats are reciprocal altruists, in that they will offer blood to other bats in need, but will recognise non-reciprocal altruists and punish them by not offering aid (Wilkinson 1984).

6. WAR

War is one of the most destructive acts that humans can partake in. Since recorded history began, humans have been engaged in warfare. The Battle of Kadesh, C.1275 B.C.⁸ was one of the first formally documented battles, however we know that tribes and cities were battling long before this time. Amid this death and destruction may seem the most unlikely place to find an act of altruism, however the act of 'falling on a grenade' is one of the most selfless acts known. It is to use one's own body to absorb the blast of a live time-fused grenade in an attempt to save the lives of nearby comrades. With little chance of survival, an individual can experience no benefits, and faces the ultimate cost – the loss of their life. This act surely fits the definition of pure altruism.

Some regards Japanese Kamikaze pilots as altruistic. In World War II, Japanese pilots embarked on suicide missions to fly planes loaded with fuel and explosives into warships in an effort to destroy them. These missions were the ultimate sacrifice. These pilots were dying for their country and could not receive anything in return. This example of altruism is obviously controversial, since dying for one's country means killing many other enemy soldiers, but seems to fit the definition of altruism.

7. CONCLUSION

The examples considered suggest that we are capable of being altruistic, however there are often other factors that drive behaviour that appears altruistic. Truly altruistic examples appear

⁸ Warner, R. (2008) "Kadesh", MilitaryHistoryOnline, Date accessed: 25/02/12, <http://www.militaryhistoryonline.com/ancient/articles/kadesh.aspx>

to be rare, but tend to occur in relation to life or death situations, when our unconscious instincts step in. In some situations, self-interested or reciprocal motivations may be disguised as altruism. In other cases, altruism may form only part of the explanation for particular behaviour. Deriving utility from altruistic actions, such as giving blood, is not necessarily a bad thing. As economists we can use this to our advantage when developing strategies to encourage certain behaviour or actions.⁹ This is incredibly important when attempting to influence people to make decisions that lead to more optimal outcomes for society. If as economics, we can understand the truthful motivations behind particular behaviour, we will be able to successfully nudge society towards a more efficient state.

⁹ The UK NHS use the tagline “Do something amazing...”, and offer the Donor Award Scheme.

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APPENDIX: CLASSROOM EXPERIMENT RESULTS

Pair No.	Amount the dictator kept	Amount sent to recipient
1	50	50
2	70	30
3	75	25
4	75	25
5	100	0
6	95	5
7	60	40
8	17	83
9	100	0
10	95	5
11	60	40
12	51	49
13	100	0
14	95	5
15	50	50
16	95	5
17	60	40
18	80	20
19	30	70
20	50	50
21	80	20
22	60	40
23	50	50
24	53	47
25	75	25
Average:	69.04	30.96