## THE BIOLOGY OF ALTRUISM REVISITED

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Editor in Chief

Dear friends of the Human Ethology Bulletin. I beg forgiveness for this very personally motivated letter. The events in late August and September 2015 in Austria give rise to thoughts about humanity. They also made me think about what makes us human.

What we know as Austria today is but a small part of what used to be the Austrian-Hungarian Monarchy. During the heyday of the monarchy, Vienna was not only the capital, but the melting pot where citizens from all nations came together. The phone book testifies for this history – surnames tell of German, Czech, Hungarian, and other origins. After World War I, the monarchy was split up into nations, leaving the German-speaking part as the remainder of Austria. How does a nation that is not a nation handle immigration?

Due to its geographic location, Austria has a long history of immigration. The three most recent large waves of immigration originated in neighbouring countries: In 1956, the political situation in Hungary forced a large number of people to leave their country. Within days, 180,000 Hungarians came to Austria much in the same way Syrians cross the Austria-Hungarian border today. Just a decade after World War II, the economy of Austria was still shaken, and poverty among Austrian citizens was an issue. Despite this, the government and official organisations worked hard to accommodate the refugees and succeeded in doing so. Ten percent of the Hungarians that fled their country in 1956 remained in Austria and became invaluable parts of Austrian society.

In 1989, the Pan-European Picknick at the Austro-Hungarian border was one of the events that eventually lead to the fall of the Berlin wall. Thousands of Eastern Germans crossed the border between Hungary to Austria to flee to Western Germany, many to reunite with their families. Austria welcomed the refugees, but very few remained. Decades later, the largest group of Non-Austrians living in Austria have a German citizenship - over 170,000.

In the 1990s, 115,000 people fled the Balkan wars to Austria, and more than half of them remained. The Balkan War also gave rise to the initiative "Nachbar in Not" (neighbour in need), a fundraising initiative dedicated to help both refugees and people who had remained in their homelands in former Yugoslavia. The activities of this initiative cast a light on what may give rise to new hope for humanity in times of globalisation: While the initial activities were directed towards neighbours, literally, later actions extended the term neighbour to become synonymous of "fellow human".

Today's communication and information technologies make the world a global village in a literal sense: We cannot ignore what happens far away. Or can we?

We have been watching people drowning in the Mediterranean for months, years, without taking on responsibility in our behaviour. We have watched people smugglers making a fortune with the despair of refugees without raising an outcry. Being exposed to bad news from all over the world every day has immunised us – possibly a necessary coping strategy protecting us from being overwhelmed by negative emotions.

This summer something seems to have changed: Suddenly something seems to happen: Images of people rushing in to help refugees in Austria and Germany go around the world. We see a movement carried by people, citizens strive to help refugees with their most basic needs, and extend a feeling of welcome. In any society, there are people who altruistically help others beyond what can be explained through reciprocity or inclusive fitness. And there are those who show outright out-group hostility. What we are currently witnessing in Germany and Austria differs from the regular moral courage, it seems to be a movement of people of all ages, socioeconomic backgrounds, and ethnic groups.

The horrible conditions from which people hope to escape, and the nightmare of the flight have become personal. First through social media, but increasingly in traditional media we experience people communicating not only the horrific facts, illustrated with selected individual stories, but their own feelings. Journalists talk about their inability to hold back their tears, something that has been limited to commentaries so far. Is this change in communication responsible for the change of tide in the general public?

We are witnesses to a phenomenon that has not been addressed in the main biological theories about altruism.

Inclusive fitness theory explains altruism through an egoistic gene approach, and is thus limited to helping among kin (Hamilton 1964). Reciprocal altruism relies on future payback, which can hardly be expected from travellers just passing through (Trivers 1971, Axelrod & Hamilton 1981).

While the ultimate explanation for helping refugees remains an open question, there is plenty of research on the proximate mechanisms: Doing good feels good. Spending money on other people actually makes people happier than spending it on themselves (Dunn, Aknin & Norton 2014). On the long run, altruism beats selfishness as it increases health (Brown, Consedine & Magai 2005). A number of scientists have put forward the idea that giving help to others leads to a release of endorphins (Hobel 1982). This mechanism might explain a positive reinforcement of altruistic behaviour, i.e. people who have helped once, are more likely to do so again (Kok & Fredrickson 2010).

The internal rewards that boost helping behaviour might be the biological basis for humane and ethical actions. They also give reason to hope that the current movement will lead to sustainable changes. When people experience the rush, the high of helping, they will more likely choose the altruistic option in the future.

We also see that there are a number of open questions about altruistic behaviour. Altruism is inherently social behaviour - there are people on the giving and receiving end. Not every altruistic act is social to the same extend. The currency of the altruistic act can be non-social as in the case of donation of money, or it can be highly social as in the case of hands on direct helping acts. It would be likely that the more social the act, the higher the reward, and consequently the more sustainable effect on altruism.

Insights into the mechanisms underlying the decision whether to behave altruistically or not are not only of scientific interest, they could be of societal import.

I hope you all are well and safe.

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