

Possibilities of Moral Progress in the Face of Evolution

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Abstract Evolutionary accounts of the origin of human morality may be speculative to some extent, but they contain some very plausible claims, such as the claim that ethics evolved as a response to the demands of group living. Regarding the phenomenon of moral progress, it has been argued both that it is ruled out by an evolutionary approach, and that it can be explained by it. It has even been claimed that an evolutionary account has the potential to advance progress in the moral domain. This paper explores the complex relationship between evolutionary explanations of morality and the possibility of moral progress. It seeks to answer the question as to what these explanations are able to tell us about the possibility of moral progress and the ways in which such progress can be achieved. It is argued that evolutionary explanations can inform moral education and other forms of moral enhancement, and that increased evolutionary knowledge figures among the changes in the circumstances of morality that can lead to moral progress. Evolutionary explanations can show us certain limits to the possibility for humans of progressing morally as well as certain enabling conditions. It is argued that both aspects – enhancement and changes in the circumstances – are equally important for the achievement of moral progress. This is illustrated by means of two examples of areas in which moral progress seems possible: our relationship towards the distant poor and our relationship towards non-human animals.

Keywords Evolution · Moral progress · Moral enhancement · Education · Distant needy · Animals

1 Introduction

Some recent philosophical accounts of moral progress ascribe an important role to evolutionary explanations of the origin and development of human morality (e.g. Jamieson 2002a and

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2002b; Kitcher 2011; Singer 1981). The explanations invoked are to some extent speculative, but they involve some very plausible claims, such as the claim that ethics evolved as a response to the demands of group living. The plausibility of such claims gives us a reason not to dismiss evolutionary explanations of moral capacities and intuitions out of hand because of the speculative character that attaches to many of them. As “how possibly” explanations (Kitcher, 12), they deserve consideration.¹

Assuming that there is such a thing as moral progress, how does it relate to human evolution? Two famous contemporaries of Charles Darwin have answered this question in radically opposed ways. Thomas Henry Huxley wrote: “Let us understand, once for all, that the ethical progress of society depends, not on imitating the cosmic process, still less in running away from it, but in combating it” (Huxley 1989, 141). Herbert Spencer, by contrast, went so far as to identify the process and the product of evolution with the good. For him, “good” simply meant “further evolved” (Spencer 1883, 25). On this view, in order to achieve moral progress, we must let natural selection do its work.

As probably many people will agree, the views put forward by Huxley and Spencer are too simple. They fail to do justice to the complexity of the relationship between evolution and the phenomenon of moral progress. Starting from an acknowledgement of this complexity, I seek to answer the question as to what evolutionary explanations of morality are able to tell us about the possibility of moral progress and the ways in which such progress can be achieved. Being interested in a diverse set of morally relevant capacities that humans have evolved, as well as in the cultural modification and enhancement of them, my focus is broader than that of Huxley and Spencer. My inquiry addresses the following points: moral enhancement as the main motor of moral progress versus changes in the “circumstances of moral practices”; traditional forms of moral enhancement versus biological moral enhancement; evolutionary limits to moral progress versus evolutionary enabling conditions.

The first point concerns the question as to whether moral progress requires, in the first instance, individual improvement in terms of improved capacities or cultivated virtues, or rather changes in the circumstances of moral practices, such as increased factual knowledge, experiences people make in their lives,² technological developments,³ social exchange (Kitcher, 196) and the emergence of an alternative to a given harmful institutionalised practice (Pleasants 2011, 149). I shall provide reasons for thinking that moral enhancement and changes in the circumstances of moral practices are mutually supportive, and that an account of how moral progress can best be achieved should not focus on either of them exclusively.

With regard to the second point, the current debate about the possibility and desirability of moral bioenhancement (the enhancement of moral capacities by biomedical and genetic means; see Douglas 2008 and 2011; Persson and Savulescu 2008; Zarpentine 2013), I side with those who defend the preferability of traditional forms of moral enhancement.

¹ Philip Kitcher distinguishes “how possibly” explanations from “how actually” explanations. Evolutionary explanations of the latter sort are available in the domain of morality, but there are not many of them (yet). For the most part we lack the necessary evidence for providing explanations of how “the ethical project” actually developed (Kitcher 2011, 11). A “how possibly” explanation aims to tell a story that is “consistent with the evidence and with background constraints” (Kitcher, 12).

² Experiences play a role in both individual development and the circumstances of morality. This shows that ultimately the distinction cannot do justice to the phenomena. Nevertheless I take it to be useful for my purposes. In this essay I focus on personal experiences understood as part of the circumstances of morality, thereby not denying that experience also plays a crucial role in individual moral development.

³ There is, for instance, the interesting concept of “technomoral change”. See Boenink et al. 2010, Swierstra and Keulartz 2011.

Regarding the third point, I shall argue that evolutionary explanations can show us certain limits to the possibility for humans of progressing morally as well as certain enabling conditions, for example by telling us something about the capacities that it might be important to strengthen or weaken in order to facilitate the achievement of moral progress, and by teaching us something about ourselves that has the potential of altering our moral beliefs for the better.

A discussion of two examples of areas in which moral progress seems possible serves to illustrate the interplay between enhancement and changing circumstances as well as the role that evolutionary considerations play in both. Here I shall not attempt to hide my normative views concerning how we ought to go about in the attempt to make moral progress in these two areas. While my account of moral progress is evolutionarily informed, I shall stress that evolutionary considerations are only one factor among many others that play a role in the explanation and achievement of moral progress, and pay attention also to some of these other factors.

2 The Notion of Moral Progress

A few remarks about the notion of moral progress are in order. Moral progress has been defined in many different ways. I shall understand it in the way expressed by Dale Jamieson's "Naïve conception": "Moral progress occurs when a subsequent state of affairs is better than a preceding one, or when right acts become increasingly prevalent" (Jamieson 2002b, 318). This conception is qualified by the important constraint that there have to be "close causal, cultural and temporal connections" between the states of affairs that are compared (Jamieson 2002b, 332).

The notion of moral progress that I use is "evolutionarily informed". I do not take an independent concept of moral progress and ask how it relates to evolution. Moral progress is understood as something that human beings are capable of. The concept refers to an ideal, but not to one that is in conflict with facts of our evolutionary history. Therefore, the term "better" in the naïve conception should be understood as referring to standards that are not in conflict with the evolutionary limitations of human morality.

I agree with Jamieson that an evolutionary account of morality should be understood as "explaining why morality evolved and persists among creatures like us", not as justifying morality or as determining its content (Jamieson 2002b, 322). Understood in this way, it does not exclude moral progress, but neither does it ensure it (Jamieson 2002b, 323). Morality is autonomous. Its biological basis limits it, without thereby determining it: "[e]volution may have brought morality into existence and established the parameters of what might constitute possible moralities for creatures like us" (Jamieson, 323).⁴ Knowledge of those biological limits should inform one's notion of moral progress.

The kind of moral progress I am concerned with is local rather than global. Global moral progress seems to me impossible to establish, given the complexity of the world and the fact that moral progress in one area or practice is often accompanied by moral regress in another. The most often cited example of moral progress is the abolition of slavery. Other examples that are discussed in the philosophical literature include: the "softening in human cruelty" (Jamieson 2002a, 21), the abolition of cruel punishment (Macklin 1977, 376), the animal

⁴ For biological constraints on the content of human morality see also van Schaik et al. 2013, 78.

rights movement (Jamieson 2002a, 22), the emancipation of women in many parts of the world (Kitcher 2011, 145–153) and the elimination of foot-binding (Appiah 2010, 53–100). The abolition of slavery arguably depended on the toleration of the suffering of British workers (see Pleasants, 155), and old forms of slavery have been replaced by new forms, which in some respects are even crueller (see Bales 2012). While in many places there is a constant development towards full gender equality, in parts of the Islamic world we see a reverse development, culminating in the practices of IS whose members are currently enslaving women. While the laws of Western democracies express, to a certain extent, the equal rights of their citizens, the governments of these countries ignore or even violate the basic rights of people living in poor and war-torn countries through their trade and environmental policies, arms exports and so forth.

3 The “Locus” of Moral Progress

A question that arises when we think about moral progress is the following: What is the key to its achievement, the capacities of individuals or the circumstances in which they act, think and feel morally? Can an evolutionarily informed account of moral progress provide an answer to this question?

In Peter Singer’s account, the human capacity to reason has a central place. Ethics has its basis in our social nature and the requirements of group living, “but in the thought of reasoning beings, it takes on a logic of its own which leads to its extension beyond the bounds of the group” (Singer 1981, 114). Moral progress is taken to consist in the expansion of the circle of moral concern, from our kin to non-kin that belongs to the in-group, to all human beings and ultimately to all sentient beings (Singer, 120–124). It is the faculty of reason that makes this expansion possible. Through reasoning, we are able to overcome those evolved tendencies that hinder the expansion of the circle, such as the tendency to feel obliged to help those who are close to us, but not far away strangers, or the tendency, ubiquitous in human history, to condemn certain ways of treating members of the in-group while permitting treating out-group members that way. This view implies that the key to making progress in morality is to get people to use their reasoning capacities more. If we only were more rational, the world would be a better place. However, Singer acknowledges that, given the way human beings are, the actual achievement of moral progress requires certain social institutions (1981, 170–173).

An alternative to Singer’s view is one that places the emphasis on emotional capacities. On such a view, the key to progressing morally is to enhance those capacities, either by traditional means such as moral education and cognitive strategies, for instance strategies for enhancing self-control (see Zarpentine 2013, 142), or through biomedical or genetic means (Douglas 2008; Persson and Savulescu 2008). A related approach is the virtue-ethical account of moral progress, according to which the key for moral progress lies in cultivating certain virtues (see e.g. Williston 2011). In the case of ethical progress in the area of climate change, for instance, candidates for virtues that need to be cultivated include justice, sympathy, respect and modesty. The hope is that by cultivating such “green” virtues, people will come to see that the members of future generations belong to our moral community, just as every human being living on this earth here and now does (Williston, 157 f.).

But perhaps the capacities or virtues of individuals should not be the focus of accounts of moral progress and we should draw our attention to the circumstances of moral practices instead? An example of an account of moral progress that focuses on the circumstances of

morality is that of Philip Kitcher. Kitcher conceives of ethics as a “social technology” and of moral progress in terms of “functional refinement” (Kitcher, 231 and 221). This view of moral progress is opposed to one that takes it to consist in the “substitution of ethical truth for ethical falsehood” (Kitcher, 187). Unlike the latter view, the former fits well with the evolution of the ethical project as Kitcher conceives of it (Kitcher, 187).⁵ He identifies “remedying altruism failures” as the original function of ethics (Kitcher, 222). Human beings evolved *limited* capacities for psychological altruism that can be exercised under certain circumstances (Kitcher, 226).⁶ Altruism failures occur and need to be remedied. This is where morality or ethics comes in. Our ancestors faced this problem of altruism failures and addressed it by starting the ethical project. The way in which they first tried to remedy these failures created new problems, which then generated new functions for ethics (Kitcher, 226). The original function of ethics can be refined through i) “advances in techniques of socialization”, ii) “integrating the [ethical] code with the system of punishment”, or iii) expanding the circle (Kitcher, 230 ff.). This refinement is mainly a matter of cultural evolution. According to Kitcher, Singer’s account of moral progress captures only one mode of moral progress.

3.1 Moral Enhancement, Traditional or Biological

I shall now turn to the debate between advocates of traditional moral enhancement and advocates of moral bioenhancement in order to elaborate on the idea that attempts to achieve moral progress should focus on individual capacities. This debate also illustrates how references to Darwinian evolution can be used for yielding opposing results.⁷

Defenders of biological moral enhancement argue that it is the best response to the threats posed by the advancements of science, in particular by technological developments (Persson and Savulescu 2011, 2013). They take enhancement to be urgently needed in order to avoid that “morally defective” individuals use the available knowledge and technology to cause extensive harm, a risk that is intensified by the available means for cognitive enhancement (Zarpentine, 142). Advocates of bioenhancement claim that traditional forms of enhancement take too much time and are unlikely to work because they depend on prior moral motivation (Zarpentine, 143).

Moral bioenhancement includes “direct pharmacological or surgical manipulation of the brain or selection of genetic material conducive to the aims of moral enhancement” (Zarpentine, 143). Its advocates propose, for instance, the suppression of “counter-moral emotions” such as “strong aversion to certain racial groups” and “the impulse towards violent aggression” (Douglas 2008, 231). They believe that evolutionary theory and primatology can show us those moral capacities that have a biological basis and should therefore in principle be within the reach of biomedical and genetic treatment. According to Persson and Savulescu (2008), the core moral dispositions of altruism and a sense of fairness are of this kind. While in her article about moral progress, Ruth Macklin emphasises that moral progress expresses changes in moral beliefs, not in human nature (1977, 377), advocates of moral bioenhancement envisage exactly the opposite. The need for bioenhancement is justified,

⁵ Kitcher’s genealogical story combines elements of biological and cultural evolution.

⁶ Psychological altruism has to be distinguished from biological altruism. While biological altruism requires merely that behaviour advances the biological fitness of another at the cost of the being whose behaviour it is, psychological altruism requires that one acts with the intention, or out of the motivation, to further someone else’s interests, without this being to one’s own advantage (see e.g. Sober and Wilson 1998).

⁷ Due to limited space, I shall not consider enhancement in connection with debates about transhumanism.

among others, by reference to the claim that our evolved moral capacities are not apt for many of the problems we are facing today, because the circumstances in which they evolved were so different from ours (see Persson and Savulescu 2011).

In addition to their ethical dubiousness, proposals for moral bioenhancement stand on shaky ground, as Chris Zarpentine shows.⁸ The envisaged interventions face serious problems raised by the complexity in moral psychological development (“ontogenetic complexity”), in particular the complex interactions between genes and environment, and the “neuropsychological complexity” of moral psychology (Zarpentine, 145). Zarpentine objects to the claim that the sense of justice is primarily determined by our genes, pointing to the complex interactions between genes and environment and to empirical research that suggests that people’s judgements about questions of fairness are more strongly influenced by societal factors than by their genes (Zarpentine, 147).

Zarpentine criticises defenders of bioenhancement for having “misrepresented the facts of human psychology” (2013, 141). He argues that humans “are not adapted to any particular past environment”, but have evolved a “capacity for phenotypic plasticity” (Zarpentine, 148), i.e. the capacity “to develop different psychological and behavioural phenotypes in different environments” (Zarpentine, 144). This enables them to adjust to changed circumstances. Humans are “designed to respond adaptively to [their] environment” (Zarpentine, 148). Zarpentine uses this insight for an argument in favour of traditional forms of moral enhancement, which make use of the human capacity for phenotypic plasticity. According to him, we can exploit that capacity by educational means and through strategies that allow us to shape our affective responses, for example “‘reframing strategies’ that direct attention away from tempting stimuli” and “‘mental contrasting’”, which is the strategy of imagining the goal that one wants to achieve and contrasting this with the present situation and the obstacles that stand in the way of achieving the goal (Zarpentine, 149). According to this view, evolutionary theory tells us that we should in principle be capable of solving complex problems that result from increased global interdependence and advanced technology.

While starting out from individual capacities, Zarpentine ends up arguing that the most promising enhancement strategy is the modification of the social or institutional context (2013, 150). He calls this strategy “ecological engineering” (Zarpentine, 149). We should use “our species’ talent for modifying our environment to promote moral progress” (Zarpentine, 150). This bears similarities with Kitcher’s account of how human have refined the social technology that is ethics and contrasts with the view of Zarpentine’s opponents, who think that we have the talent to modify our environment in a way that we cannot adapt to. Zarpentine’s position is an example of an approach that focuses on individual capacities while at the same time highlighting the role of institutions.

The debate about the right form of moral enhancement shows that different understandings of the evolution of certain capacities lead to different views as to how we should go about enhancing them. What both views have in common is the focus on the capacities of individuals and the assumption that evolution can, to a certain extent, show us the way in which moral enhancement should proceed. Traditional moral enhancement has the advantage of relying on means and strategies that have already proven to be effective (see Zarpentine, 148), and it gains

⁸ Moral bioenhancement is ethically problematic, because in order to be effective, it would have to be compulsory (see Persson and Savulescu 2008), which implies that some authority would have to decide for everyone what the desired degree of altruism is etc., we do not know what side-effects it might have, and so forth. For ethical objections and how it might be possible to meet them see Douglas 2008, 235 ff.

further plausibility through its acknowledgement of the role of institutions. It moreover avoids serious ethical worries (see note 8).⁹

3.2 Changes in the Circumstances of Moral Practices

Let me say a bit more about the idea that changes in the circumstances of our moral practices can bring about moral progress, by introducing the idea that these practices are in part constituted by their “surroundings”. This notion is narrower than that of the circumstances of morality. Not everything that is part of the circumstances of morality is constitutive of our shared moral practices. Any particular experience of any particular individual, or any particular instance of social exchange, for example, does not belong to the constituents of moral practices.

On the Wittgensteinian account of moral practices that I developed elsewhere, these practices are constituted not merely by certain rules, but also by their aims, their point, and their “surroundings” (or environment).¹⁰ The term “surroundings” refers to certain facts such as the fact that human beings are vulnerable and that there is scarcity of goods, and to facts of our evolutionary history. These facts limit the possible differences between moralities. Recall Jamieson’s insight that evolution “may have [...] established the parameters of what might constitute possible moralities for creatures like us” (Jamieson 2002b, 323). In the light of these facts about our evolved nature and the world we live in, it makes sense that moral rules that can be found across all cultures include prohibitions on lying and murder, restrictions on the use of violence, the rule that infants must be protected, and the incest taboo, and not for example their opposites. While those facts do not justify these moral norms, the norms nevertheless depend on them. The facts make *these* norms useful for human beings and not others (see Hermann 2015, chapter 7).

“Surroundings” also refers to the existence of certain knowledge such as knowledge about the causes and effects of climate change. That knowledge, which we were lacking a few decades ago, is constitutive of our current moral practices. Flying was not morally relevant 60 years ago, but it is now. The fact that we now have knowledge about the long-term effects of pollution has changed our moral practices. The environment of moral practices moreover includes technological developments and the emergence of alternatives to actual practices (see Pleasants, 149).

Whether our attempts to achieve moral progress should focus on enhancement or on the circumstances of morality partly depends on empirical questions such as whether, for instance, people are likely to have experiences that can counter their “strong aversion to certain racial groups” (Douglas, 231) or whether they are likely to gain the kind of knowledge that can counter-act such an aversion. Which view is more realistic: the view that such “counter-moral emotions” can be suppressed by biological means or traditional forms of enhancement, or the position that people will lose them as a result of having made certain experiences and having gained certain knowledge? How effective are experiences and knowledge in this respect? These questions are difficult to answer. Zarpentine’s account of traditional forms of enhancement shows that enhancement and modifications of the circumstances are interrelated.

⁹ A further problem for proposals of moral bioenhancement is that after the respective biological interventions, we might not be able to speak of people acting as moral agents anymore, and consequently not of moral progress. I am grateful to an anonymous reviewer for raising this worry.

¹⁰ For a more detailed exposition of these ideas see Hermann 2015 chapter 2.

However, he conceives of such modifications in terms of an enhancement strategy, thus subordinating changes in the circumstances of moral practices to individual enhancement, which he seems to identify with moral progress. I want to go in a slightly different direction, suggesting conceiving of enhancement and changed circumstances as two equally important, mutually supportive factors that facilitate moral progress, understood as the transition towards a state of affairs that is better than the previous one according to standards that are internal to our moral practices.

4 Distant Needy and Non-Human Animals

Let me illustrate the interplay between enhancement and changed circumstances, and the powers of cultural forces, by way of looking at two areas in which further moral progress is possible: our relationship towards the distant needy and our relation towards non-human animals. In each of these areas, both the education of capacities and virtues and changes in the circumstances of morality can contribute to the achievement of moral progress. Since evolutionary considerations, which I shall situate within the factors that can bring about moral progress, are only one factor among many, parts of my discussion of the examples are not related to evolution. That I chose examples that fit the metaphor of the expanding circle particularly well does not mean that I conceive of moral progress exclusively in terms of this metaphor.

4.1 Moral Obligations towards the Distant Needy

According to Singer, acknowledging that we have moral obligations towards people who are far away from us amounts to an expansion of the circle of moral concern. Has humanity achieved this expansion? It seems that some progress has indeed been made. Today, a considerable number of individuals living in affluent countries tries to help people who are suffering in the world's poorest countries by donating money or doing paid or unpaid work for governmental and nongovernmental organisations. I assume that in most cases, these donations and practical engagement express the recognition of certain obligations towards those who are being helped. These obligations can be conceived of as positive duties to help (see Singer 1972), or as negative duties to stop harming (see Pogge 2004).¹¹ The circle of moral concern thus seems to have expanded to include the distant needy. However, we can also observe behaviour that casts doubt on this claimed expansion. Most people do not feel obliged to refrain from buying their children luxury goods instead of using that money to provide basic goods for African children, for example.¹² Also, the donations people make are often very small and almost not felt by the donors. Moreover, the majority of citizens of rich countries support the exploitation of workers in countries such as Bangladesh, including the practice of child labour, with the choices they make as consumers. Such behaviour and attitude shows that the moral progress that has been made in this area is very limited. How might further progress be achieved?

¹¹ According to Pogge, the duties of governments and citizens of affluent countries towards the global poor stem from their involvement in the causation of their misery. Extreme poverty is partly due to colonisation and to the rules of the global economic order, i.e. to a specific power regime.

¹² For the view that above a certain threshold, justice requires parents to support other people's children instead of buying their own children unnecessary goods see Rachels 1997.

4.1.1 *Changes in the Circumstances of Moral Practices*

Let us consider the circumstances of moral practices first. Here relevant factors include increased knowledge about the causes of poverty, an increase in possibilities for helping the poor, including better knowledge of these possibilities and assistance in making use of them, as well as personal experiences, for example during a trip through a poor country.¹³ For instance, knowledge about international trade can lead people to the conclusion that the current system puts poor countries at a disadvantage and that the majority of the population of those countries is indirectly harmed by everyone who supports a government that in turn supports the current global order (Pogge 2004). Such a view can motivate people to put pressure on governments and non-state actors to change that system, which manifests specific power relations. Furthermore, new technological possibilities enable new ways of organising help, for example via online platforms.

Asked how he came to be so concerned with the issue of global justice, Thomas Pogge answered that it was a trip through Asia that made him aware of how immensely people were suffering in some parts of the world (conversation with Pogge at the Carnegie Council on January 19th 2012).¹⁴ Such experiences have the potential to affect people in a way that changes their moral beliefs.¹⁵ Having seen the immense suffering with one's own eyes, one might think differently about issues such as global justice or duties towards the poor.

What is the role of evolutionary explanations? Such explanations provide a reason for questioning intuitions such as the one, which is widespread, that we have greater duties towards our family and friends than towards strangers (see Greene 2007, 47). Once we learn that having such an intuition was adaptive for our ancestors, we should think about whether there are good reasons for this priority of duties, and whether our duties towards strangers are not stronger than is usually assumed. As Singer puts it: "What we take as an untouchable moral intuition may be no more than a relic of our evolutionary history" (1981: 70). "Biological explanations of ethics" can make us "think again about moral intuitions which we take to be self-evident moral truths but can be explained in evolutionary terms" (Singer, 84). I think that there are reasons for prioritising our duties in the way most people do, for instance the fact that usually we are more capable of helping those who are close to us, and the fact that we cannot give the children of others the same love that we can give to our own children. However, due to the internet, the existence of international organisations and the possibility to set up projects on a small scale there is a lot that we can do for people in other parts of the world, and this provides us with reasons for accepting relatively strong obligations towards them as well.

4.1.2 *Moral Enhancement*

I just identified parts of the circumstances of morality that can be the motor of moral progress. Now I shall consider ways in which moral enhancement, in its traditional form, is able to advance progress in this area. The focus will be on moral education, but other traditional forms of enhancement will be touched upon in passing. It seems to me that an important task of moral education in this regard is to encourage children and adolescents to imagine the suffering

¹³ Education is of course relevant here, but not the kind of education that I shall focus on in the next section, i.e. moral education.

¹⁴ The conversation can be found here: <https://www.youtube.com/watch?v=GP7wHi3nOEG&feature=relmfu>.

¹⁵ Of course personal experiences can also change one's moral beliefs for worse.

of people in extremely poor countries such as Niger or Sierra Leone. This is a use of “induction”, the educational method that consists in attempting to make someone imagine what it feels like for another person to be in distress. Training the imagination in this way seems to be crucial for getting people to care about a group they did not care about (much) previously. Humans can thereby transcend their evolutionarily based bias towards their own group and come to react with strong emotions to the fact that people whom they do not know and who live far away from them are suffering. As we know from recent empirical studies, emotions play a crucial role in making moral judgements (see e.g. Greene et al. 2001; Greene and Haidt 2002; Greene 2005; Prinz 2006; Young et al. 2010). The training of emotions, which is a crucial component of moral education, and the training of the imagination should not be conflated, but they are closely related.¹⁶ Induction is used to further the “development of guilt and moral internalization in children” (Hoffman 2000, 10). Training of the imagination can moreover expand the scope of emotional reactions. If we can bring it about that children become adults whose “emotional buttons” (Greene 2007, 47) are pushed by the suffering of distant strangers, the expansion of the circle will likely be more substantive than the one we have achieved so far. My suggestion is that a sentimentalist way of expanding the circle has to accompany the rationalist way described by Singer. But of course it is highly unlikely, and perhaps also not desirable, that the bias will ever be overcome entirely. There are evolutionary limits to the capacity of caring for others.

The possibility of training our imagination in the way described supports the claim that we have a capacity for phenotypic plasticity. Humans are in principle able to adapt to the highly globalised world they have created, for instance by strengthening their ability to imagine what it feels like to suffer from extreme hunger and thirst, thereby broadening the scope of their emotional dispositions. This kind of training of the imagination has not only a place in moral education, but also in the moral enhancement of adults.

On a virtue ethical account, moral progress requires the cultivation and broadening of virtues such as benevolence, generosity, justice, sympathy and respect. As Williston argues in connection with climate change ethics, becoming more virtuous requires not to restrict the moral community in ways that are unjustified, for example by failing to recognise members of future generations as members of that community (2011, 158). In the case of the distant needy, who, unlike the members of future generations, exist, it is uncontroversial that they ought to be seen as members of the moral community.

Of course moral education has to be complemented by the development of complex reasoning capacities, since agents who lack such capacities cannot address complex moral problems. Regarding our duties towards the global poor, we need these capacities for deliberating about how to weigh those and the duties we have towards members of our family, friends, and fellow citizens, for deciding which organisation to support or work for, what kind of changes in the international trade system to push for and so forth. While emotions can make us aware of our duties towards the poor and motivate us to help them, reason is needed for making the right decisions regarding what actions to take.

4.1.3 The Interaction of Enhancement and Changes in the Circumstances

I have suggested that both changes within the circumstances in which we think, feel and act morally and ways of educating moral capacities and virtues can contribute to moral progress in

¹⁶ I thank an anonymous reviewer for asking me to clarify this.

the area of our relation to distant strangers. How are the two related and which is more important?

The availability of knowledge about the causes of poverty, for instance, depends on the existence of people who do research on this topic and on people who make the effort of making the results of that research publicly available. It is desirable that those people do these things in a morally responsible way, and moral education, if successful, results in agents who take moral concerns seriously. Also the motivation to carry out this kind of research and make it publicly available can be the result of moral education, but such research might also be motivated exclusively by non-moral interests such as an interest in economic processes, or even by immoral interests such as an interest in how the poor could be exploited even more effectively. The availability of possibilities to help depends on people who create these possibilities, for example by setting up charities or development projects to which people can contribute. Again, by investing in moral education we make it more likely that there will in the future be sufficient people who do these things.

At the same time, moral education depends, for instance, on knowledge about people's suffering and its causes. In the course of moral training, children and adolescents are confronted with paradigmatic cases of immense suffering, become aware of possible ways to relieve that suffering, get an insight into how their own life is related to the lives of those who are suffering, acquire tools for deliberating about how to counteract extreme poverty and so forth. In addition, existing power regimes limit the chance to recognise strong duties towards the distant poor.

It is, therefore, very likely that moral progress in this area is brought about by the interplay of features of the circumstances and moral education or enhancement. This insight counts against views that focus one-sidedly on either the circumstances or enhancement. Modifications that lead to a moral improvement of the motives of agents, which is how Thomas Douglas understands moral enhancement (2008, 229), cannot bring about moral progress on their own. The view that urgent problems such as climate change can be attributed exclusively to the motivational deficits of people (Douglas 2008, 230) is overly simplistic.

4.2 Moral Obligations towards Animals

Jamieson mentions the animal rights movement as an example of local moral progress (Jamieson 2002a, 22). For Singer, once the circle of moral concern encompasses also most non-human animals, its expansion is complete and human reason has reached a triumphalist victory over evolutionary biases.¹⁷ According to Singer, “[t]he only justifiable stopping place for the expansion of altruism is the point at which all whose welfare can be affected by our actions are included within the circle of altruism” (1981: 120; see also 1995). Unfortunately the conditions in which most of the animals that are used for food are kept have not improved much since Jonathan Safran Foer described them in his bestseller *Eating Animals* in Safran-Foer 2009. As Nigel Pleasants writes in his article about the abolition of slavery, the exploitation of animals for food is an example of an immoral practice that is generally accepted, despite the knowledge about the enormous suffering it causes (2011, 147). If we look at it from this perspective, our relationship with animals seems like an area in which moral progress is urgently needed, rather than one in which substantial progress has already been achieved. Let us again consider separately some features of the circumstances that are

¹⁷ The reason why Singer excludes some animals is that in some cases it is doubtful that the animal is able to feel anything. He mentions oysters and “even more rudimentary organisms” (Singer 1981: 120).

relevant for making moral progress in this area and the progressive potential of moral education. What Singer wrote in 1981 still holds: “The expansion of the moral circle to non-human animals is only just getting under way” (Singer, 121).

4.2.1 *Changes in the Circumstances of Moral Practices*

Factors that can effect people’s beliefs about the moral acceptability of practices such as factory farming, testing medicines and cosmetics on animals, keeping animals in zoos or breeding fish in aquacultures, include, but are of course not limited to, increased (or better available) knowledge about the conditions in those farms, laboratories, zoos and aquacultures, knowledge about animals’ capacities for suffering and knowledge about how much we share with other animals.¹⁸ It is with regard to the last kind of knowledge that evolutionary theory comes in. It provides us with reasons for accepting our animal nature and rejecting the view that there is a radical discontinuity between *Homo sapiens* and other primates. Primatologists such as Frans de Waal have spent countless hours observing our closest evolutionary cousins, chimpanzees and bonobos, and suggest interpreting their behaviour as exhibiting retributive emotions, empathy and an impulse to help (de Waal 2006, 18 ff.). No matter if the social behaviour of non-human primates is regarded as different from human morality only in degree or in kind,¹⁹ the observations of primatologists make us aware of the continuities between other primates and us. This awareness can change our attitude towards them. Perhaps the Great Ape Project will gain more adherents in the future (<http://www.greatapeproject.org>).

Relevant experiences include seeing a factory farm, slaughterhouse or animal lab from the inside, and observing animals, seeing how their behaviour reveals sensitivity and intelligence. Examples of relevant social exchanges are conversations with animal activists or people working in for example a factory farm, and debates among friends about topics such as vegetarianism or veganism. Such experiences, conversations and debates can change our moral beliefs and thereby the way we act. We might become vegetarians, found or join a vegan society, organise a campaign against zoos, or stop buying cosmetics that were tested on animals. The possibility to produce meat in the lab is an example of a new technological possibility that changes moral practices and can contribute to moral progress.

As mentioned above, Pleasants has pointed out another way in which the circumstances of morality matter. As he argues convincingly in his article about the abolition of slavery, the abolition of a harmful institutionalised practice requires the existence of a plausible alternative, which in the case of slavery was wage labour. The ability to point to an alternative that is available and superior lifts objections to a harmful institutionalised practice “out of the realm of merely moralistic expression and into that of efficacious radical social criticism” (2011, 156). Although the abolition of for instance factory farming still seems to be a long way off, it is at least possible that an alternative to this practice will continue to take shape, gradually gaining widespread recognition as plausible and superior. Once more and more people come to see that factory farming is by no means necessary in order to feed the world’s population, criticism of this practice may become more widely respected and effective.²⁰

¹⁸ Safran Foer made an important contribution to the wider dissemination of information about factory farms.

¹⁹ For this controversy see for instance Macedo and Ober 2006.

²⁰ An example of alternative farming is Joel Salatin’s Polyface farm, which is presented on the farm’s website as a “family owned, multi-generational, pasture-based, beyond organic, local-market farm and informational outreach in Virginia’s Shenandoah Valley” (<http://www.polyfacefarms.com/>, accessed on 12 April 2016). I thank an anonymous reviewer for pointing me to this.

4.2.2 *Moral Enhancement*

How can moral education contribute to moral progress with regard to our relationship with animals? One example is the use of “induction” in relation to animals. This involves for instance the attempt to make a child who has hurt an animal to make her imagine what it would feel like to experience similar harm. Induction highlights the distress of the victim as well as the action that caused it (see e.g. Hoffman 2000, 10).

Like in the case of our responsibilities towards the distant needy, training the imagination in this way is crucial. Within the course of moral education, children should be encouraged to imagine how it must feel for an animal to live in a small cage, to stand the whole day in their own faeces, to be separated from their offspring, to be experimented upon and so forth. We can conceive of this also in terms of cultivating certain virtues. By strengthening our imagination and our capacity for empathy, we can extend our altruistic tendencies beyond the limits that can be explained by evolutionary forces.

Currently animals are sometimes used in the classroom with the purpose of advancing children’s moral development, in particular the development of empathy (see Daly and Suggs 2010). On the condition that the well being of those animals is guaranteed, making children sensitive to the needs and interests of animals could extend this practice. In this extended version of the practice, there would be animals in classrooms not only for the development of empathy in general, but also for the development of empathy in relation to non-human animals in particular. This requires that teachers have the appropriate attitude and regard the animals not merely as instruments for developing empathy in humans, but also as creatures that ought to be the object of moral concern.

Drawing once again on Pleasants’ article about slavery, it would make a big difference if children learned about practices such as using animals for food, research etc. in a manner that was not value-neutral. While our children learn at the same time what sort of practice slavery is and that it is morally wrong, they usually learn that animal products serve nutritional and other functions, and it is only later that they might begin to question such use of animals (Pleasants, 152). Those vegetarians and vegans whose children learn simultaneously what animals are used for and that this use is morally problematic, or wrong, are a small minority. Following that minority in making children aware of the ethical questions related to the use of animals from early childhood onwards would be a big step towards moral progress in this area.

4.2.3 *The Interaction of Enhancement and Changes in the Circumstances*

Since the general point about the interaction between capacities and circumstances should be relatively clear by now, I shall set out only briefly how the educational means just described interact with features of the circumstances. People who have been trained to care about the well being of animals are more likely to make the effort to inform the public about cruel practices, to popularise the results of scientific research on the capacities of animals and to look for alternatives to current practices. Information about such alternatives, about animals’ capacities and about the ways in which many animals are currently being treated can be used in moral education. The use of the method of induction as applied to animals requires adults who are capable of empathising with animals and for whom animals are objects of moral concern. The different kinds of knowledge listed above can contribute to such an ability and attitude in adults who did not require them during childhood. Like in the case previously discussed, moral enhancement and changes in the circumstances are mutually supportive.

5 Conclusion

I hope to have provided some insight into the complexity of the relationship between evolutionary explanations of morality and moral progress. As we have seen, different views of the evolution of certain capacities lead to different views as to how we should go about enhancing these capacities, and can moreover result in different estimations of the prospects for moral progress. It was argued that moral enhancement and changes in the circumstances of morality are mutually reinforcing, and that accounts which focus one-sidedly on either of them are inadequate.

As illustrated by means of two examples, evolutionary considerations are relevant for the assessment of possibilities for moral enhancement, and increased evolutionary knowledge figures among the relevant changes in the circumstances of moral practices. Two general points can be made here: First, evolutionary theory gives us hints as to what the natural limitations of for example altruistic tendencies are, and how they could be overcome. As Zarpentine's proposals for traditional moral enhancement demonstrate, a view of the human being as having evolved a capacity for phenotypic plasticity can, in combination with knowledge about human moral psychology, serve as the basis for claims about possible ways of achieving moral progress via moral enhancement. I suggested that strengthening certain imaginative capacities is one way of adjusting our emotional responses to new moral problems. As I argued with reference to recent empirical research, a sentimentalist way of expanding the circle of moral concern should complement the rationalist way described by Singer. Secondly, knowledge about the possible evolutionary origin of certain widespread moral intuitions give us a reason to subject these intuitions to critical scrutiny, since circumstances might have changed thus that the intuitions have become inadequate. However, it has to be stressed that evolutionary considerations are only one factor among many others that play a role in the explanation and achievement of moral progress, and I have addressed some of these other factors.

Given the speculative character of many evolutionary explanations and the variety of hypotheses that are around, references to evolution can be used to support pessimistic as well as optimistic moral outlooks. According to the most pessimistic evolutionarily informed outlook, given the inaptness of our evolved emotional responses and the dim prospects of both traditional and biological moral enhancement, moral progress is highly unlikely to occur. According to the most optimistic outlook, given our capacity for phenotypic plasticity, increasing knowledge of moral psychology and a better understanding of the evolution of the ethical project, the chances are good that there will be (further) moral progress. As my discussion of the two examples has shown, I see real possibilities for making moral progress, but whether they will become actual is an open question.²¹ With Kitcher and John Dewey, I share the hope that "a properly informed understanding of the ethical project and its evolution might lead our successors to pursue it more sure-footedly" (Kitcher, 2007).

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