Chapter 35 Darwinian Morality, Moral Darwinism

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Abstract This paper aims to dispel some relapsing misconceptions regarding Darwin's writings on morality. Based on a detailed reading of *The Descent of Man*, the paper emphasizes that "Darwinian morality" – i.e. Darwin's views about the emergence of morality among the human species – is highly different from the so-called "moral Darwinism" sustained by several authors (especially Spencer and Galton). Darwin develops a continuist approach to morality, according to which the moral sense emerges from the intellectual capacities and social instincts shared by human beings and the other species. But he constantly insists on the contingency of human morality, and rejects the extension of moral abilities beyond the human species. Last, we maintain that Darwin's normative views about evolution, as opposed to Spencer's, do not fall into the trap of "naturalistic fallacy", i.e. the confusion between "is" and "ought".

Opening the "Darwin File", especially regarding issues related to morality, inevitably leads to profound misunderstandings, numerous misconceptions and many controversies. A simple observation helps to explain this point: often vilified, even demonized, and constantly regarded in a bad light, Charles Darwin, in reality, was little read. And most of the blame levied against what we might call "moral Darwinism", in fact, concerns other authors, such as Herbert Spencer and Francis Galton. Yet, as we celebrate the bicentennial of Darwin's birth and 150 years since the publication of *The Origin of Species*, it is important now, more than ever, to restore to some extent the memory of an author too often stigmatized. Often commented, long criticized and often misunderstood, Darwin's writings on the emergence of morality are indeed of great importance for those who want to fully grasp the natural foundations of human societies. And to understand the Darwinian theses, one must first return to Darwin's writings, beyond contradictions or ideological biases. In particular, it is important to read *The Descent of Man*, a book in which Darwin uses the theory of evolution to account for the emergence of moral phenomena.

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A detailed reading of the text leads one to immediately make a discovery which could prove disconcerting: Darwin, contrary to his reputation, is not a moral Darwinist. In other words, Darwin never said that evolution rendered man a being capable of objectively recognizing good and evil. Darwin never purported that the evolution of the species went hand and hand with moral progress; far from it. Reading Darwin's writings, it is rather the opposite impression which most often emerges. Repeatedly, Darwin never ceases to affirm that the trajectory of the evolution of the species cannot be built on a normative paradigm, against which it would be possible to evaluate rules and moral values. Moreover, Darwin never said that morality, as we know it, could be found beyond the human species. On the contrary, according to him, if there is one characteristic that distinguishes man from all other species, it is the sense of morality. Above all else, dispelling the misconceptions associated with his theses makes reading Darwin's texts so necessary. Our goal in this chapter is just that.

1 The Descent of Man: A Groundbreaking Book

In The Descent of Man (1871), Darwin proposes to extend the theory of descent with modification to the human race, the central concept in *The Origin of Species*. Its publication in 1859 indeed sent shock waves through the scientific and philosophical communities. However, in this work, ultimately, there was little question concerning man. It is precisely this silence which was broken with the publication of the book in 1871. The Descent of Man, in this sense, involves not only issues of a scientific nature. The 1871 book also had many ramifications in the political and philosophical realm, at a time when also the struggle between liberalism and conservatism was also being played out. It is important to take the full measure of the revolution initiated by Darwin, a phenomenon not lost on his contemporaries. Shortly after the publication of TDM in 1871, The Edinburgh Review surmised that if Darwin's theory were true, "the majority of individuals among the most serious will be forced to abandon the very principles based upon which they attempted to lead noble and virtuous lives, as they were based in error [...]. If these arguments are correct, a revolution in thought is imminent, which will shake society to its very core, destroying the sanctity of conscience and religious sentiment." What makes TDM such a subversive book in regards to traditional morality? This is the point that we will try to elucidate here by first analyzing one of the fundamental consequences of the Darwin's theory of evolution: the rejection of teleology.

According to proponents of teleology, nature and humanity are guided by a goal, a purpose, not by chance alone. Within a theological framework, teleology presupposes that God is the ultimate creator of the universe. It is precisely against that idea of a divine plan that Darwin argues in favour of the concept of "natural selection." According to Darwin, in fact, natural selection is a blind process, which is in no way occurs in a deliberate manner. The very phrase "natural selection", in this sense, should be used with caution. Darwin himself was well aware of the semantic ambiguity inherent in this expression, to the point of later attempting to replace it by the term "preservation". He eventually abandoned that idea. In this

sense, Darwin takes a stand against any attempt at rational theology, like that of William Paley. In his 1802 book entitled *Natural Theology; Evidences of the Existence and Attributes of the Deity collected from the Appearances of Nature*, Paley argued that the perfection of natural laws could only be explained by the existence of a divine, omniscient and omnipotent being.

According to Darwin, if the emergence of the human organism is not the result of divine wisdom, but the result of process of variation and selection, then the same is true with regard to the human faculties, and in particular the moral sense. So far from being the product of a benevolent and omnipotent will, human morality could be something else entirely. Thus, as Darwin wrote, if "men were reared under the same conditions as bees, there would be little doubt that our single females would think, like worker bees, that they have a sacred duty to kill their brothers, and that mothers would try to kill their fertile daughters; and no one would think of preventing it." (*TDM*, p. 185). We cannot find a more striking example to illustrate the contingency of human morality!

Similarly, Darwin gradually distances himself from his contemporary Alfred Russel Wallace, with whom he carried on a long and rich correspondence. The correspondence between Darwin and Wallace reveals the latter's gradual adoption of teleological theories. According to Wallace, natural selection alone cannot explain the existence of the higher resources of humanity, and especially the existence of moral sense. Wallace considered that while natural selection may be able to explain certain human traits (eg. skin color), it cannot account for other typically human characteristics. In particular, the man's noblest faculties cannot be explained by variation and selection alone. Other explanatory principles must be involved. In the same way, according to Wallace, it is necessary to postulate the existence of a Supreme Intelligence, which created man in order for him to reach a "most noble goal." In contemporary terms, we might say that Wallace was a supporter of the theory of human uniqueness. However, for Darwin, as we have seen, the idea of a finality of nature is highly questionable. So he does not hesitate to write to Wallace: "It does not seem to me that there is any greater purpose in the variability of organic beings and in the action of natural selection, than in the direction in which the wind blows." Adopting the opposing position to Wallace's regarding teleology, Darwin claims in TDM, to the contrary, in TDM that the man's noblest faculties are not the expression of a difference in nature, but rather of one in degree between the human species and animals deemed "inferior". This is the key to what we might call Darwinian continuity.

2 Phylogenesis of the Moral Sense: Darwinian Continuity

2.1 Morphological and Intellectual Similarities

Darwin tries repeatedly to emphasize the similarities between humans and other animals. These similarities are found primarily on the morphological level. As pointed out in *TDM*, there are many anatomical and physiological similarities between man and other members of the vertebrate class. Comparative anatomy

corroborates this by identifying the skeleton, nerves, vessels, and even the brain in comparing human beings and higher apes. And it is this vision of continuity which is at the heart of *The Expression of the Emotions in Man and Animals* (1872), a book in which Darwin attempts even further to demonstrate that human behavior, conversely, possesses traces of its animal ancestry.

It was with a similar goal in mind that Darwin began to highlight the phylogenetic roots of man's moral sense. More specifically, according to Darwin, man's moral sense emerges from two elements which can be observed in the animal kingdom. On the one hand, the existence of intellectual and emotional capacities. On the other hand, the presence of a number of social instincts from which moral sense is able to develop.

2.2 Intellectual and Emotional Capacities

In Chapters III, IV and in the last chapter of *TDM*, in particular, Darwin considers the issue of mental, emotional and intellectual development in mankind. First, Darwin says, many of the mental abilities found in man are also present in some of the so-called "inferior" animals. On many occasions, Darwin did not hesitate to emphasize the fact that the intellectual capacities of animals are much more developed than what most of the scientific and philosophical tradition continuously asserted before his time. As he explicitly states at the beginning of Chapter III, "there is no difference between man and the higher animals in terms of their mental capacities." (*TDM*, p. 150).

Many animals are capable of imitation, such as birds which "imitate their parents' song, and sometimes that of the other birds" (*TDM*, p. 157). (Darwin even related the story of a dog, raised by a cat, which gradually learned to mimic a cat licking its paws!) Some animals are also capable of progress and improvement: through education and training, they are able to learn not to repeat the same mistakes. Finally, animals are able to feel certain emotions that Darwin described as "intellectual", such as boredom, surprise or curiosity. Darwin even claims that some animals (such as dogs) can be jealous and others experience rivalry, or possess a "sense of beauty", as illustrated by the decoration of some birds' nest. These descriptions tinged with anthropomorphism might raise eyebrows among the practitioners of contemporary ethology. However, we must not lose sight of Darwin's objective: to demonstrate the close relationship between animal and human capacities, as opposed to the idea of a qualitative leap, an immeasurable difference in kind. Similarly, Darwin discusses the issue of social instincts.

2.3 Social Instincts

Beyond certain intellectual faculties, animals also possess a characteristic fundament to the emergence of the moral sense: social instincts. Without social instincts, there cannot be morality. From the outset let us underline an important point about the origin and nature of social instincts: even if they obviously have a biological basis according to Darwin, nonetheless they may be modified by social environment and intelligence. Indeed it is in this way that these instincts can be moralized. Against a whole tradition of philosophical and scientific thought, Darwin did not therefore oppose instincts and intelligence. Both have a common origin in the nervous system and can interact, thus rendering the emergence of the moral sense in human beings possible. As Darwin wrote: "We know very little about the functions of the brain, but we can imagine that, as intellectual capacities develop more, the various parts of the brain must be connected by very intricate channels, allowing the most fluid intercommunication, and, consequently, each separate part would tend to be less well adapted to respond to particular sensations or associations in a defined and inherited manner - that's to say, instinctive "(TDM, p. 152). The issue here is crucial: Darwin insists on the fact that social instincts are innate (and transmitted through heredity), but they can also be modified by intelligence, habit and social learning, thereby constituting the condition of possibility fundamental to human morality.

How do social instincts manifest themselves in animals and human beings? As described in Chapter XXI of Darwin's *TDM*, "animals endowed with social instincts take pleasure in being in each other's company, notify each other of danger, defend and help each other in many ways" (*TDM*, p. 73). Thus, wolves cooperate while hunting. Similarly, some animals are endowed with sympathy, as the little dog who will not hesitate to pounce on anyone who attacks his master. Darwin presents several examples intended to demonstrate the phylogenetic roots of morality: Indian crows feeding their blind counterparts or baboons in captivity attempting to protect another baboon which was going to be punished. These examples constitute evidence of the presence of social instincts in other animals.

Darwin purports that social instincts have the same origin as all other instincts: they were selected during the evolution of our species. Social instincts, as such, are characters in their own right: transmitted through heredity, they are subject to variation, and therefore can be selected objects. In the same way that natural selection has led to the emergence of vital instincts, it has also retained the social instincts, allowing those who carried them to survive.

However, according to Darwin, social instincts differ from other instincts to the extent that they are still, in his words, "present" and "persistent". And it is this very persistent aspect of the social instincts that will enable them to form the basis of the moral sense. One of the characteristics of the social instincts resides in the fact that they may conflict with other instincts. What happens when such a conflict arises? The Darwinian response is instructive: "After having yielded to any temptation, we compare the fading impression of a temptation spent with the social instincts still present, or habits acquired in our youth and reinforced throughout our lives, until they became as powerful as instincts. If we do not give in to the temptation when it is still before us, it is because either the social instinct seems stronger to us, when compared with the fading impression of the temptation" (TDM, p. 213). Through the selection of social instincts, we see that man has a moral and social nature which

makes him gravitate towards the community and demonstrate concern for others. Thanks to social instincts, man does not only act to preserve his selfish interests, but also takes into account the social environment.

The psychological expression of these social instincts is none other than pleasure and pain. Indeed, it is pleasure that encourages individuals to associate in order to form increasingly larger communities. In the absence of pleasure, people would not feel a desire to unite. In this regard, the pleasure and pain experienced by human beings in the context of social interactions derive from the pleasure and pain initially experienced within the family circle, which developed through gradual extension. In fact, Darwin wrote "the feeling of pleasure that society feels is probably an extension of kinship and filial relationships; in general, one can attribute this extension to natural selection, and perhaps also, in part, to habit. Because in animals for which social life is beneficial, individuals which find the most pleasure in being united are best equipped to escape various dangers [...]. It is useless to speculate on the origin of the parents' affection for their children and the children's affection for their parents. These affections are obviously the basis for social affections." (*TDM*, p. 112–113).

Society, according to Darwin, begins at the individual level. It rests on the individual's instincts, and manifests itself in the form of pleasure and pain. But how exactly can these social instincts give rise to human morality? This is the point that we will now examine.

3 The Emergence of Morality in Humans

3.1 Group Selection and Reciprocal Altruism

If the social instincts can be found in human beings as well as in other animals, how can we specifically explain the emergence of morality in humankind? Darwin attempted to answer this very question by examining the social lifestyle of man's ancestors based on the theory now called "group selection".

If we conceive of man's ancestors as living in separate tribes, one can imagine, according to Darwin, that the existence of moral habits could provide a selective advantage to members of certain tribes. Indeed, if we consider a competition between tribes, it could be inferred that those whose members possess certain social instincts, such as group loyalty, obedience and, self-sacrifice for the community, would vanquish other tribes. Let's imagine two tribes (call them Tribe A and Tribe B) competing for a given territory. If Tribe A is composed of selfish members, desperately concerned solely with their survival solely, with no inclination to help the group, and if the Tribe B is composed, in Darwin's words, of individuals possessing "the spirit of patriotism, loyalty, obedience, courage and sympathy " (TDM, p. 221), then it is highly likely, again according to Darwin, that this group B will win. Moral sense (as well as rational abilities and technical skill) is therefore one of the capabilities which would have enabled some tribes to dominate the human species in the past. And tribes whose moral sense was underdeveloped were

somehow "eliminated" from the competition. As Darwin explained, "[...] although a high level of morality gives each individual man or his children only a slight or no advantage at all over other men of the same tribe, an increase in the number highly skilled men or progress in the level of morality, however, will certainly give a significant advantage to one tribe over another" (*TDM*, p. 220).

In other words, the presence of moral sense in some communities may explain why these communities were able to triumph over other communities which did not posses this sense of morality.

But how was moral sense able to emerge within a tribe? To answer this question, Darwin uses a theory similar to what evolutionary biologists today call "reciprocal altruism": as rational capacities of the members in a tribe develop, through experience, they are able to understand that by helping others they can increase the chances of survival of the whole. Indeed, "as the tribesmen"s predictive capabilities and reasoning improved, each man quickly learned that if he was helped his peers, and that he would usually receive help in return" (*TDM*, p. 219). So motivated, group members could develop the habit of performing benevolent actions, potentially to be inherited by later generations, and resulting in a dynamic of group selection. The second source of the emergence of moral sense is none other than praise and blame. The inclination to help others might have been motivated by a need for admiration, and a desire to avoid the shame and stigma. Finally, according to Darwin, insofar as the virtues possessed by individuals can be selected, and therefore transmitted to subsequent generations, the moral sense can be inherited.

3.2 The Moral Sense as a Hallmark of Human Beings

Continuist though he may have been, Darwin, nonetheless, also insisted on the fact that men possess fundamental characteristics which distinguish him from the rest of the animal kingdom. We can even say that if Darwin continues to emphasize the close relationship between humans and animals, it is merely to further underscore what separates them the most: the moral sense. As Darwin insists at the beginning of Chapter IV of *TDM*, "of all the differences that exist between man and inferior animals, the moral sense is most important" (*TDM*, p. 183). How can we then comprehend this assertion and at the same time entertain the idea that there is indeed continuity between human beings and other animals?

It is clear that on this point Darwin's arguments may, at first glance, seem paradoxical. He wrote, "any animal, no matter which one, endowed with well affirmed social instincts, including parental and filial affections, would inevitably acquire a moral sense or a conscience as soon as its intellectual capacities developed to the same degree, or almost, as that of man" (*TDM*, p. 184). However, it is only seems to be a paradox. Darwin's arguments are in keeping with his analysis of other animals' mental capacities. For moral sense to exist, certain intellectual capacities (imitation, reasoning) and social instincts must in fact be present. Accordingly, other animals could indeed acquire a moral sense. But this in no way means, as

Darwin insists, that this moral sense would be identical to that of mans'. Darwin is clear on this point: "It's important to say that I do not want to purport that any strictly social animal, even if its intellectual capacities were to become as active and as highly developed as man's, would acquire the same moral sense as ours "(*TDM*, p. 185). Therefore, man is in fact the only truly moral being. And even if another being endowed with qualities similar to our morality were to exist, it would still be highly dissimilar to human beings.

Moral sense, if one follows Darwinian theory, seems to be what most differentiates man from other animals. To what extent does morality help define the essence of man? What are the characteristics that man possesses and which seem to be lacking in other animals? If we assume a common ancestry between humans and apes, how do we explain the fact that man possesses moral capacities significantly different from those of other animals, even those with whom he is closely related? According to Darwin, it is primarily due to the development of his mental faculties that man distinguishes himself from other animals.

More specifically, a fundamental feature which only characterises the human species and differentiates it from other species is reflexivity. Of all creatures, according to Darwin, man is the only one capable of giving meaning to his own actions, the only one who can give them value retrospectively. And this capacity, crucial in the development of the moral sense, is a major difference between human beings and animals. Thus, the emergence of a conscience is a fundamental step in the genesis of morality. Indeed, the conscience plays a decisive role in several respects: it reinforces social instincts, gives rise to moral duties, and promotes, among other things, the planning of moral action. In this sense, there is indeed a fundamental difference between humans and other species. Man alone can correctly be described as moral, because "a moral being is a being capable of comparing his past actions or motives and to approve or disapprove of them. We have no reason to suppose that any of the inferior animals are capable of this" (TDM, p. 198). Moreover, in Chapter XXI, Darwin once again advances this idea, in very similar terms: "A moral being is one who is capable of reflecting on his past actions and their motives, of approving some and disapproving others, and the fact that man is the only being who deserves this qualification is the biggest difference between him and inferior animals" (TDM, p. 731).

What are the consequences, on the psychological level, of man's capacity to retrospectively examine the meaning of his actions? One of the fundamental expressions of this capacity of man as a moral agent is none other than remorse. That is to say, the moral individual feels remorse when he thinks about a past action, and he connects this action with another fundamental element of human morality: the disapproval of others. It is indeed the disapproval (real or imagined) of others that can produce feelings, such as shame, repentance or remorse. Thus man will avoid committing acts which could be frowned upon by others, and the pain that accompanies it. It is by virtue of this same principle, for example, that "more than one Hindu was stirred to the depths of his soul for eating unclean food" (*TDM*, p. 201). Moved by praise and blame, the moral agent will try as much as possible to avoid the latter and seek the former, a source of pleasure. Similarly, of all living creatures, man alone understands the concept of duty, the result of rational thought processes, which

animals are not capable of. And it is by virtue of this sense of duty that man is able to control his most compelling instincts, particularly those that urge him to seek self-preservation at the expense of others.

3.2.1 Universal Sympathy

Specifically human, the mental capabilities described above reflect a capacity possessed by man alone: universal sympathy. As a social instinct, sympathy allows the communication of emotions and the emergence of the moral sense. It is through sympathy, for example, that the suffering of an individual can affect the spectator who witnesses it, and prompt the latter to perform a benevolent action.

First of all, sympathy is not a strictly moral sentiment, because its field of extension is limited. As Darwin explained, inferior animals (as well as numerous peoples around the globe) feel sympathy that is limited to those closest to them, and to members of their community. The so-called "inferior" animals, meanwhile, are unable to sympathize in such a broad sense. They do not feel sympathy for all the individuals of their species. With regard to animals considered to be "inferior," Darwin distinguishes two types: the social species and the non-social species. Within the social species, sympathy extends to members of the community, with whom cooperation is established, for example. Within the non-social species, such as lions and tigers, sympathy is directed towards their offspring, but not to other members of their community.

What about sympathy in human beings? Originally restricted to members of the groups to which individuals belonged, sympathy can however extend well beyond the limits originally assigned by natural selection, and this thanks to the progress of civilization and culture. On this point, Darwin aligns himself with the theories of David Hume, John Stuart Mill and Adam Smith on the extension of sympathy. Indeed, as explained in Hume's *Treatise on Human Nature* (1739), followed by Mill in *Utilitarianism* (1861) and by Smith in his *Theory of Moral Sentiments* (1758), man does not naturally possess a moral sense, which allows him to recognize fairness or goodness. It is through civilization, education and, social reinforcement that moral sentiments emerge and develop. Therefore, for Hume and Mill, the feeling of sympathy, which is not initially moral, becomes so, progressively through society, which establishes rules, standards and obligations.

4 Darwin and "Moral Darwinism"

4.1 Darwinian Morality

Which moral doctrine did Darwin put forward? Was Darwin what we would today call today an advocate of evolutionary moral realism? To read Darwin's work would suggest that this is not the case.

According to the proponents of evolutionary moral realism (many of whom can be found in Anglo-Saxon countries), we would have to look at biological evolution in order to objectively develop moral values. In other words, evolutionary moral realists believe that moral values are both natural – that is to say, a product of biological evolution – and objective. They are neither fictive nor the simple result of sociocultural constructions. In short – beyond doctrinal differences on the moral nature of man – evolutionary moral realists share the common belief that biological evolution would constitute a normative reference, which would enable us to access the moral function of the human species.

Darwin, to the diligent reader, does not subscribe in any way to such a theory. Nowhere in his writings can one find the idea that evolution and natural selection foster moral development or aid in the definition of man's moral function: a position often attributed to Darwin, which, in fact, has never been defended by him. Given the Darwinian theory of evolution, one would rather suggest the opposite idea: from a moral point of view, the dynamics of evolution are guite neutral. And we would be hard pressed to draw from evolution a normative conclusion regarding our moral duties from evolution. Darwin's position, regarding the genesis of moral sentiments outlined previously, must be understood: moral sentiments have certainly proven to be useful, since they have enabled the survival and the reproduction of the human species. But it would be a bit premature, Darwin insists, to say they are all real. Under no circumstances do the moral sentiments implanted by evolution lead us to what is just and good. This therefore challenges a long held notion in moral philosophy, and, in particular, British moral philosophy: the one, according to which human beings, by their very nature, have the ability to recognize good and evil. Such was, for example, the argument put forward by theorists who were advocates of the "moral sense". They affirmed that man has the ability to distinguish, through a God-given sense of morality, between vice and virtue.

With emphasis placed on the natural origins of moral sentiment, moral realism is consequently compromised. Indeed, if the moral sense is solely the result of an unfinished value-neutral process, how can one conceive of it as being a reflection of absolute moral truths, based in an ideal world, emanating from divine will, or even the products of biological evolution itself?

In fact, Darwin was not alone in showing some resistance to the idea that there could be "values" deriving from evolution. His friend Thomas Huxley shared quite a similar point of view in a famous lecture he gave in 1893. Thus, as the latter writes, "cosmic evolution may teach us how the good and evil tendencies of man may have come about; but, in and of itself, it is incompetent to furnish any better reason why what we call good is preferable to what we call evil." Huxley added, in a clear statement: "Let us understand once and for all that the moral development of society depends not on our imitation of the cosmic process, and still less on our detachment from it, but rather on our fight against it."

Indeed, on several occasions, Darwin has repeatedly stressed that the observation of nature in no way enables us to identify a moral order, as a sage will that is universally expressed. Rather it is the contrary which seems to dominate: the spectacle of nature, upon observation, reflects the triumph of cruelty, suffering and what, from a moral point of view, is not defensible. And it is precisely the observation of nature, moreover, which casts doubt in Darwin's mind about the existence of a divine Providence operating in the world. The absence of design in evolution has a fundamental consequence with regard to the value of moral systems: they are not perfect, far from it. Human morality is the result of a contingent process, which could well have been quite different. This idea (at the heart of contemporary evolutionary biology) clearly indicates that Darwin never sought to sanctify any "natural order".

If the spectacle of nature does not provide us with an intangible moral compass and if the evolution of the species cannot be erected as a moral guide, then what is the basis for morality? According to Darwin, a particular moral doctrine must be followed: utilitarianism. In a world deserted by divine Providence, only utilitarianism can provide moral guidance. The ultimate principle of utilitarianism is simple (simplistic, its critics would say): one can say that an action is good if it tends to increase the amount of happiness in the world, and bad if it increases the amount of suffering. Social instincts are central here in Darwin's advocacy (also a great reader of J.S. Mill) of utilitarianism here: in fact, he says, it is because of social instinct, for example, that a man may attempt to save the life of a fellow human being in a fire, at the risk of extreme peril. In doing so, this individual is in no way driven by pleasure or self-interest. Instead, he is motivated by impulses which prompt him to act for an altogether different purpose: collective utility. The principle of utility, as a behavioral rule, therefore allows us to counter the quest for personal interest. (CPR, p. 208).

Here we see just how wide the divide is between Darwin and moral Darwinism: the reason being that the definition of moral good that he proposes conflicts with the idea that moral value of an action depends on its capacity to favor the survival and reproduction of organisms.

4.2 Darwin vs. The Moral Darwinians

Evidently, Darwin's moral theory bears little resemblance to its often caricatured depiction. More precisely, it is not to be confused with those of Herbert Spencer and Francis Galton. Many attempts have indeed been made to derive moral standards from the dynamics employed by biological evolution. But if one had to identify the most illustrious figure behind these multiple attempts, it would undoubtedly be Hebert Spencer, the founder of what is commonly referred to as "social Darwinism". The proponents of social Darwinism regard biological evolution as a creative process, through which progress in society is achieved. In this sense, the elimination of the unfit facilitates this progress, in accordance with a "trick of nature" as it were.

Unlike Darwin, Spencer believed that evolution made sense and that it offered the species an increasingly rich and comfortable existence, as well as an opportunity to raise their offspring in an increasingly safe environment. And our moral responsibility, given this perspective, would be to foster the values of evolution. From Karl von Baer's embryological works, Spencer retains the central idea of his system: the existence of a type of development that occurs through integration and differentiation, with a transition from the homogeneous to the heterogeneous (the famous " law of evolution "). In the Data of Ethics @, published 8 years after *The Descent of Man*, Spencer asserted that the emergence of the moral sense is part of a larger process of the growing complexity of the natural world. According to this process, applicable on a cosmic scale, and which Spencer called the "law of evolution", all organisms develop in accordance with a process of increasing complexity. And this dynamic results in the emergence of the moral sense within the human species; so that for Spencer, superiority and complexity are completely synonymous notions. It is evident that Spencer believed that there was a close parallel between moral standards and biological evolution: the process of increasing complexity, a natural component of the evolution of organisms, triggered a dynamic of moralization.

This reduction of the normative to the natural received biting criticism from the philosopher G.E. Moore in *Principia Ethica* (1903) @. According to Moore, Spencer (as well as other authors) committed a "naturalist fallacy", in assimilating what is morally good to what is biologically evolved or complex. Moreover, Moore claimed that it was perfectly illegitimate to reduce moral principles to a set of natural factors. Indeed, as Moore explains in Chapter 13 of *Principia Ethica*, the uncertainty surrounding the meaning of good, in his opinion, leads one to ask an "open question": for example, when we ask ourselves "Is X good?", it is always possible to replace "X" with essentially any descriptive characteristic (such as pleasure or biological complexity) without the question losing its meaning. Therefore, the meaning of such a question is not predetermined a priori, so that it is impossible, based on a solely conceptual analysis, to equate good with a particular natural property. Consequently, Moore concluded that it is impossible to determine whether natural phenomena such as pleasure, happiness, or biological complexity can be equated with good.

Darwin, as we have seen, does not commit this natural fallacy, which can, however, be attributed to Spencer.

Similarly, it would be wrong to confuse the position defended by Darwin with that of his cousin Francis Galton, who inspired eugenics and founded biometrics. According to Galton, it is necessary to apply the rules of artificial selection to society, in order to regain the purity of nature. Such a measure involves interventionist eugenics and the planned elimination of the unfit (the latter being deliberately excluded from reproduction). In some way, this involves using artificial means to regain the beneficial effects of natural selection. However, as we have seen, Darwin never advocated such a view. From his point of view, biological evolution is most certainly not an optimal process, but it should not be replaced by any such form of artificial selection. Furthermore, the fact that the least fit are not eliminated does not constitute a "flaw" in the evolution process for Darwin, but, on the contrary, it represents a hallmark of the human species, and especially the trace of civilization. Because, as Darwin wrote, in civilized life, "[...] we do everything within our power to stop the elimination process; we build asylums for the mentally deficient, the disabled and the ill; we institute laws for the poor; and our doctors deploy the full scope of their abilities to prolong each individual life to the utmost "(CPR, p. 222). This is completely at odds with Galtonian eugenics.

5 Conclusion

Caustic, revolutionary and iconoclastic, Darwinian thought remains more relevant than ever. Challenging the dogmas of his day, Darwinian theory led to the demystification of morality, no longer attributed to any sort of theological providentialism, but rather subject to the transformation mechanisms in operation throughout nature. In light of Darwinian continuity, our sense of morality is no longer a unique characteristic that defines the essence of man, but the result of adaptive processes of which many traces can be found within other species. As we have seen, this continuist approach does not neglect the specificity of human beings: man, as a moral being, possesses skills which are not accessible to other species, specifically, the capacity to look back retrospectively on the meaning and value of his actions. In a word, man possesses one thing that so-called "inferior" animals do not: moral conscience.

However, while the result of Darwin's evolutionary theory was to reintegrate morality into nature, it deals just as severely with theories which seek to replace the natural order with that of the divine. While moral truth is not transcendent (nor transcendental), while it does not reside in any heavenly ideas, it certainly does not emanate from nature, the sanctification of which would be excessive. And those who view Darwin as a fierce defender of "the values of evolution" and moral progress stemming from natural selection simply have no knowledge of his writings on the subject.

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