Studia Philosophica Wratislaviensia Supplementary Volume, English Edition 2012

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Duty and Beauty. Evolutionary Ethics in Relation to the Darwinian Aesthetics^{*1}

Abstract

Metaphysics, or the knowledge of what there is, has been traditionally placed at the pinnacle of philosophical hierarchy. It was followed by theory of knowledge, or epistemology. Practical knowledge of proper modes of conduct, ethics, came third, followed by aesthetics, treated usually in a marginal way as having to do only with the perception of the beautiful. The hierarchy of philosophical disciplines has recently undergone a substantial transformation. As a result, ethics has assumed a central role. The aim of this paper is to suggest that the hierarchy of philosophical disciplines is not yet complete and that one further step needs to be taken. According to the claim advocated here, it is not metaphysics, epistemology, or ethics, but aesthetics that is the first and foremost of all philosophical disciplines. This claim is argued for by references to findings of evolutionary aesthetics, especially to Charles Darwin's idea of sexual selection as elaborated in The Descent of Man. I also argue that Darwinian approach to morality is, and should be, derivable from a Darwinian aesthetics which lies at the core of his conception of sexual selection.

Transformation of the Philosophical Hierarchy

At the beginning of the past century Sigmund Freud has famously remarked that human self-esteem had suffered three great blows. The first of them had been dealt by Copernicus who established that earth is not at the centre of the universe,

 $[\]ast$ The original version published in Lectiones & Acroases Philosophicae, 3 (2010), pp. 175–202.

¹ A draft of this paper has been read during a conference "Darwin's Impact on Ethics. Past and Present. Multidisciplinary Seminar in Commemoration of the Bicentennial of Darwin's Birthday and 150th Anniversary of *Origin of Species*", University of Wrocław, Poland, May 19, 2009. Final version of the paper owes a great deal to the participants of the seminar, especially to professors Francisco J. Ayala (Irvine University), Andrzej Elżanowski and Bogusław Pawłowski (both from the University of Wrocław). I am most indebted, however, to David W. Miller (Warwick University), for his critical and pertinent reading of the paper.

"but only a tiny fragment of a cosmic system of scarcely imaginable vastness"; the second one came from Darwin who had invited mankind into the animal kingdom by demonstrating our "ineradicable animal nature"; the third one was a result of the discovery of the Unconscious which brought about the awareness that the conscious and rational ego is fact the servant of the unconscious and uncontrollable forces residing in human mind. (Out of modestly, Freud ascribed this discovery to Arthur Schopenhauer.)

The philosopher of science, Imre Lakatos, introduced a distinction between two kinds of scientific research programmes: progressive and degenerative ones. Despite 150 years since the publication of The Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life,² the programme initiated by Charles Darwin shows no signs of degeneration. On the contrary: it continues to inspire such a great host of new theories and ideas that it certainly deserves the name of a progressive programme. "Since Darwin's time, the evidence supporting his theories has become stronger and more comprehensive. The virtually unlimited supply of evolutionary information encoded in the DNA sequence of living organisms allows evolutionists to reconstruct all evolutionary relationships leading to present-day organisms, with as much detail as needed. If you invest the necessary resources (time and laboratory expenses) and you can have the answer to any query, with as much precision as you want. Evolutionists are no longer concerned with obtaining evidence to support the fact of evolution. Rather, evolutionary research nowadays seeks to reconstruct more and more details about evolutionary history and to understand further how the process of evolution occurs".³

We may gauge the fertility of the programme by reflecting upon the developments in science inspired by his theory, especially in the science of man. It inspired Herbert Spencer in his rather questionable assertions concerning the "natural", and thus desired social order; it has become a background of the evolutionary theories of cognition, language, economics and ethics. There is even an evolutionary theory of cosmic self-therapy, which argues that the damage effected by humans upon the Earth, diagnosed as *Disseminated Primatemaia*, will generate a healing response, if not a revenge on the perpetrators.⁴

The transformation mentioned by Freud has left indelible marks on the traditional hierarchy of philosophical disciplines, even if sometimes belatedly. Originally, metaphysics, the knowledge of what there is, has been placed at the pinnacle of the philosophical hierarchy. Aristotle gave it the name of the first philosophy and was followed in this by generations of philosophers for nearly two millennia. Second came the theory of knowledge, or epistemology. Practical knowledge of proper modes of conduct, ethics, came third, followed by aesthetics, which has

² Ch. Darwin, The Origin of the Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life (New York 1979), pp. 459–460.

³ 5 Questions for Francisco Ayala on Charles Darwin and His Legacy, [in:] http://www.britannica.com/blogs/2009/02/an-interview-with-francisco-ayala-evolutionarybiologist-britannica-contributor-on-charles-darwin-his-legacy/; accessed May 11, 2009.

⁴ J. Lovelock, Gaia. The Practical Science of Planetary Medicine, (Oxford 2000); also J. Lovelock, The Revenge of Gaia. Earth's Climate Crisis and the Fate of Humanity (New York 2006).

been usually treated in a rather marginal way, as having to do only with the perception of the beautiful.

This traditional hierarchy was challenged during the Renaissance and Enlightenment periods, especially by Descartes, Hume and Kant. In his *Critique of Pure Reason* Kant maintained that in virtue of the structure of human cognition which he presented, we are not in a position to assert for certain the existence of anything in the external world; he compared his discovery to the Copernican revolution. Having deposed metaphysics from its throne, Kant firmly established the priority of the theory of knowledge. He also attached greater importance to both ethics and aesthetics, though they still retained a secondary status vis-á-vis epistemology.

The ancient hierarchy was revived for a while in a new form by Bertrand Russell who, in *Principles of Mathematics*, had attempted to accomplish a deduction of the whole body of knowledge from a parsimonious set of ontological assumptions, influencing in this way a number of thinkers, most notably Ludwig Wittgenstein. A post-modernist rebellion in the 20th century against the traditional philosophical hierarchies, inspired to a significant extent by the work of the mature Wittgenstein who repudiated most of his earlier philosophy, has effected a significant reversal. The next steps in this deconstruction deprived the knowing subject itself of its epistemologically privileged, transcendental position. It has been argued that human cognition is affected, both in its content and adequacy, not only by the external world, but also by social, political economic, and cultural, i.e. moral factors. This led to a conviction that the knowing subject should be seen as dependent in its cognition upon multifarious influences, and indeed it is constituted by them. As a result, ethics came to be considered the first philosophical discipline.⁵

Toward the end of the past century Richard Rorty, incontestably the most popular philosopher of the world of that time, had stressed the importance of Darwin's work to philosophy by saying that it behoves us to "give the self-image Darwin suggested to us a whirl, in the hope of having fewer philosophical problems on our hands".⁶ The aim of this paper is to suggest that the evolution of the hierarchy of philosophical disciplines is not yet complete, and that one further step needs to be taken. My argument is based on a claim, outlined elsewhere,⁷ that it is not metaphysics, epistemology or ethics, but aesthetics is the first and foremost of all philosophical disciplines. I shall attempt to demonstrate this claim by helping myself not so much to Charles Darwin's idea of natural selection, proposed in *The Origin of the Species*, but rather to his idea of sexual selection, elaborated in *The Descent of Man*. I shall attempt to show the legitimacy of the Darwinian approach in morals in an indirect way. I shall argue that a Darwinian approach to morality is, and should be, derivable from an Darwinian aesthetics which lies at the core of

 $^{^5}$ A. MacIntyre, Dependent Rational Animals. Why Human Beings Need the Virtues? (Chicago–La Salle 1999).

⁶ R. Rorty, *Hilary Putnam and the Relativist Menace*, [in:] R. Rorty, *Truth and Progress*, *Philosophical Papers*, vol. 3 (Cambridge 1998), p. 48.

⁷ A. Chmielewski, The Gaze and Touch in the Public Space. Toward the Political Aesthetics, [in:] Wrocław Non Stop. Urban Space (Wrocław 2008), pp. 84–92.

his conception of sexual selection. In other words, I would like to give a new whirl to the philosophical image of humans, by drawing on some of Darwin's ideas.

Duty and the Natural Selection

Having finished several chapters of *The Descent of Man*, Charles Darwin went to Wales for a holiday. He met there a notorious women's rights campaigner, Ms. Frances Power Cobbe. He shared with her the view that men's superiority versus women can be explained by means of the idea of male's struggle for the possession of females; the imperative of possessing females by males endows them with vigour and courage, and even organs, that females lack; for these reasons, in comparison to males, females may be considered "under-evolved". In her response Ms. Cobbe has lent Darwin a book by Immanuel Kant, apparently in a hope of winning him to the idea of the equality of sexes. Even though Darwin remained unconvinced as to the equality of sexes, and expounded a very Victorian view of morality in this regard, Kant's book inspired him to provide a provisional answer to the question of the origins of morals.⁸

In *The Critique of Practical Reason* Immanuel Kant expressed his wonder as to the power and origins of moral duty: "Duty! Thy wondrous thought, that workest neither by fond insinuation, flattery, not by any threat, but merely by holding up thy naked law in the soul, and so exerting for thyself always reverence, if not always obedience; before whom all appetites are dumb, however secretly they rebel; whence thy original?"⁹ This Kantian question has been treated by most philosophers with such a great deal of veneration that few dared to answer it in a way which would depart from Kant. The genius and courage of Charles Darwin lies in the fact that he took up this question, and that he answered it in a revolutionary manner.

His answer is formulated in a strictly scientific way, according to the principle of parsimony in scientific explanation, established by Pierre-Simon Laplace. As a well known anecdote has it, Laplace wrote a five volume book on the solar system, *Celestial Mechanics*, without mentioning God. When Napoleon asked him: "Monsieur Laplace, they tell me you have written this large book on the system of the universe, and have never even mentioned its Creator", he answered: "I have had no need of that hypothesis". Even if it has become possible, ever since,

⁸ J. More, A. Desmond, Introduction, [in:] Ch. Darwin, The Descent of Man, and Selection in Relation to Sex (London 2004), pp. xlvii–xlviii.

⁹ Darwin quotes these words of Kant's in *The Descent of Man* (p. 120) from *Metaphysics of Ethics*, transl. by J.W. Semple (Edinburgh 1836), p. 136.; the quote, however, comes from the *Critique of Practical Reason* (1788), rendered by L.W. Beck (I. Kant, *Critique of Practical Reason* (New York 1993) p. 90) in the following way: "Duty! Thou sublime and mighty name that dost embrace nothing charming or insinuating but requirest submission and yet seekest not to move the will by threatening aught that would arouse natural aversion or terror, but only holdest forth a law which of itself finds entrance into the mind and yet gains reluctant reverence (though not always obedience) – a law before which all inclinations are mute even though secretly work against it: what origin is worthy of thee, and where is the root of thy noble descent which proudly rejects all kinship with the inclinations and from which to be descended is the indispensable condition of the only worth which men alone can give themselves?" (Polish transl. by J. Gałecki (Warszawa 1984), pp. 142–143).

to explain the workings of the physical nature without invoking God's name, few ventured to explain the human world without reference to religious concepts. This was done by Charles Darwin who, in response to Kant's question, wrote: "[A]ny animal whatever, endowed with well-marked social instincts, the parental and filial affections being included, would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well, or nearly as well developed, as in man".¹⁰ In his work he had shown that human morality may be explained without reference to the action of non-natural factors or the interference of supranatural beings. His explanations had no need for that hypothesis.

Opposition

From the very beginning Darwin's ideas were met with hostility from the people of the Church. Among the outspoken opponents of evolution was Samuel Wilberforce, the Bishop of Oxford, who debated Thomas Huxley, "the Darwin's bulldog", challenging him to say whether he claims to have descended from a monkey through his father or mother. For this Huxley took a belated revenge when Wilberforce, an excellent horse-rider, lost his life after having been shaken off from by his ride the very moment he boasted to his companion, Lord Grenville, about his masterly horsemanship, his head hitting a stone. Huxley reportedly commented upon the incident by saying: "For once, reality and his brain came into a contact and the result was fatal".¹¹

Huxley, an eager disciple of Darwin's, diverged significantly from his master by arguing that human nature, being a product of the natural world, "red in tooth and claw", is essentially evil. Morality, according to Huxley, is an exclusively human invention aimed to combat and to control selfish and competitive tendencies; even if evolutionary processes would not have been possible without them, they have to be tamed in order to make a peaceful and orderly human society possible. "[T]he practice of that which is ethically best – what we call goodness or virtue – involves a course of conduct which, in all respects, is opposed to that which leads to success in the cosmic struggle for existence. In place of ruthless self-assertion it demands self-restraint; in place of thrusting aside, or treading down, all competitors, it requires that the individual shall not merely respect, but shall help his fellows; its influence is directed, not so much to the survival of the fittest, as to the fitting of as many as possible to survive. It repudiates the gladiatorial theory of existence. It demands that each man who enters into the enjoyment of the advantages of a polity shall be mindful of his debt to those who have laboriously constructed it; and shall take heed that no act of his weakens the fabric in which he has been permitted to live. Laws and moral precepts are directed to the end of curbing the cosmic process and reminding the individual of his duty to the community, to the protection and influence of which he owes, if not existence itself, at least the life

 $^{^{10}}$ Ch. Darwin, *The Descent of Man*, pp. 120–121. Almost immediately he relativised this claim by saying that it does not mean that any social animal would acquire exactly the same moral sense as ours, more or less in the same way as various animals do have a sense of beauty, though they admire very different objects.

¹¹ D. Adrian, M. James, *Darwin* (New York 1991), p. 601.

of something better than a brutal savage".¹² He concluded: "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".¹³

In this way Huxley has separated ethics from evolution, making it impossible for the science of biology to have any say about the emergence of human morals. His approach, however, has an important drawback, for within his perspective one would have to abandon the principle of parsimony observed by Darwin in the explanation of human world, by postulating some extra-natural factor responsible for the generation of moral rules.

Morals in Nature

Despite Huxley's claim, a number of studies in socio-biology and evolutionary psychology have successfully attempted to demonstrate that it is possible to explain the emergence and operation of human moral rules, including altruism, sacrifice, justice, love and equality, i.e. the concepts and categories which constitute the essence of human morality, by appealing to principles outlined and suggested by the Darwinian understanding of evolution.¹⁴ A great number of empirical studies have shown, for example, that Darwin was right in saying that "any animal whatever", having developed social instincts and mental faculties in a sufficient degree, develops also well defined rules regulating their mutual relations, and that these rules resemble those which are in force among humans. The study of primates have demonstrated that some of them, most notably chimpanzees, orang-utans and capuchins, are displaying altruistic capabilities by sharing food, entering reciprocal exchange transactions, and behavioural expectations. For example, a chimpanzee contender for the alpha position is winning popularity within his group by acquiring food and distributing it among his potential allies, to which they normally would not be able to have an access. An undeniable practice of food sharing among primates has been interpreted as a part of the system of mutual obligations, as in the subordinate adult male chimpanzees' grooming of the dominant alpha male in exchange for an undisturbed mating session or, as among bonobos, an exchange of food is a form of winning sexual favours or as an act of status enhancement.¹⁵

The primates have also been shown to be capable of conflict resolution and post-conflict reconciliation. "Especially after a serious conflict between two adult males, the two opponents sometimes were brought together by an adult female. The female approached one of the males, kissed or touched him or presented herself

¹² T. Huxley, *Evolution and Ethics*, scanned and edited by T.D. Gowan for Project Gutenberg, http://manybooks.net/, accessed May 10, 2009, pp. 80–81.

¹³ *Ibidem*, p. 84.

¹⁴ Among the most popular ones are M. Ridley, *The Origins of Virtue* (London 1996; Polish transl. Poznań 2000); M. Ridley, *The Red Queen. Sex and the Evolution of Human Nature* (London 1993; Polish transl. Poznań 1999); R. Baker, *Sperm Wars* (New York 1996; Polish transl. Poznań 1999).

¹⁵ J.C. Flack, F.B.M. de Waal, Any Animal Whatever'. Darwinian Building Blocks of Morality in Monkeys and Apes, [in:] L.D. Katz (ed.), Evolutionary Origins of Morality (Thoverton 2000), p. 5.

toward him, and then slowly walked toward the other male. If the male followed, he did so very close behind her $[\ldots]$. When the female sat down close to the other male, both males would start to groom her and they simply continued when she went off".¹⁶ They are also capable of showing empathy, sympathy and consolation in distress. De Waal has interpreted these data in the following manner: "Inasmuch as every member benefits from a unified, cooperative group, one expects them to care about the society they live in, and to make an effort to improve and strengthen it [...]. Continued infighting, particularly at the top of hierarchy, may damage everyone's interests, hence settlement of conflict is not just a matter of parties involved, it concerns the community as a whole. This is not to say that animals make sacrifices for their community, but rather that each individual has a stake in the quality of the social environment on which its survival depends. In trying to improve his quality for their own purposes, they may help many of their group mates at the same time. A good example is arbitration and mediation in disputes, standard practice in human society – courts of law serve this function – but recognizable in other primates as well".¹⁷

Sexual Selection

Among things that natural selection, based on the concept of the survival of the fittest, cannot explain, is the notorious peacock tail which certainly does not enhance the survival chances of its owner but positively reduces them. Yet, despite the tenets of natural selection, it is there; as Darwin wrote to his friend Asa Grey: "The sight of a feather in a peacock's tail, whenever I gaze at it, makes me sick". Since the complexity of some animal features could not be explained by means of natural selection alone, Darwin came up with the idea of sexual selection. He elaborated this conception in order to fill a lacuna left by his concentration on natural selection in his *Origins*.

A large share of living beings propagate themselves by means of a mechanism known as sex. The biological fact of sex as a means of reproduction, or at least some of its aspects, continues to be mysterious for biologists since sex involves a significant paradox: "benefits of sex are not so obvious as its costs".¹⁸ There have been many theories attempting to explain why, despite the costs involved in sexual propagation, it has evolved at all. According to the now received view, sexual propagation is a more beneficial mode of reproduction than asexual one because nonsexual organisms are capable of producing only exact copies of themselves. Thus, in case of a change in the environment from hospitable to non-hospitable to the organisms in question, they, together with their offspring, lose a chance of survival and all become extinct.

In contrast, sexual propagation, even if very costly, enables generation of more diverse offspring. "If we consider two organisms differing only in that one is sexual and the other not, the sexual does not survive to reproduce any better than the asexual one. In fact, given the costs of finding a mate and otherwise being sexual,

¹⁶ *Ibidem*, p. 14.

¹⁷ *Ibidem*, p. 14–15.

¹⁸ R.E. Michod, Eros and Evolution. A Natural Philosophy of Sex (Reading 1995), p. 4.

a sexual partner may actually be worse off in terms of surviving and reproducing than an asexual one. However, having a diverse group of offspring, a sexual partner may end up with more surviving offspring that an asexual one. If, for example, the habitat becomes colder, only the offspring with heavy fur coats may be able to survive. Even if this type did not exist in the population, two sexual parents may have a chance of producing it through chance recombination of their genes".¹⁹ Eventually sex, however pleasurable it may happen to be, does not benefit the individuals involved in the sex themselves, but only their offspring, and with them, the whole species by increasing a chance of its survival. A modified version of this "variation view of the sex" asserts that sex is really not for parents, offspring, or even for organisms: "The most basic biological consequence of sex is not even reproduction but rather the health and preservation of the genes, or DNA molecules, carried by organisms that practice sex".²⁰ The benefit of sex lies in its cleansing and rejuvenating effects of the DNA molecules which are in charge of our biological constitution.

Social animals, primates included, are, as a rule, sexual, which means that they propagate by means of sexual intercourse. As sex is of a paramount importance to the survival of living beings, and since reproductive sex is necessarily a social intercourse, it is of utmost importance for them regulate the sexual traffic. Among reasons for this is the fact that not all effects of sexual intercourses have the rejuvenating and cleansing effect, e.g. the incestual ones. No wonder, then, that sex has always been a subject of the elaborate systems of control and regulation. Many studies demonstrate that social animals, in order to survive, have to regulate their social behaviour in this most important aspect of their biological life.

It has been suggested that a rule which may have been crucial in establishing specifically human culture, has evolved due to the fact that some primates became capable of regulating their thus far promiscuous sexual behaviour. According to this theory, formulated on a basis of the comparison of humans and chimpanzees, females living in a group have established a rule of their sexual inviolability during menstruation period, forcing in this way the males to find an another occupation for themselves during that period, for example collecting food to be consumed jointly after the period of untouchability has ended. Furthermore, this practice, apart from being conducive to food procurement and thus survival, has also the effect that it leads males to be more monogamous. In this way they are forced to participate not only in the conception of the offspring, but also in its rearing, which further increased the chances of survival of thus evolved pre-humans. A key role in this has been played by the evolved mechanism of menstrual synchrony among pre-human females which enabled them to form mutual solidarity ties in their relation with males: "Females" became "women" when finding themselves in "situation-dependent solidarity [...] collectively drew on their own biological resources to give their menstrual blood its collectively constructed 'meaning' as a symbol of their inviolability. The consequent rule against rape was the first

¹⁹ *Ibidem*, p. 5.

²⁰ *Ibidem*, p. 6.

cultural rule and the foundation on which all other rules were built".²¹ In other words, thus evolved females made the pre-human societies more egalitarian.

Sex and Senses

According to Aristotle, all humans strive for knowledge, which is demonstrated by their love of senses, "especially the sense of sight".²² In other words, humans are not only sexual, but also sensual beings. Most of all, however, they are visual beings. Darwin devoted much attention to the role of sensual perception in the regulation of animal sexual behaviour. Having touched upon the topic in *The Origin of the Species*, he spent much more time investigating this problem in *The Descent of Man.* Something which fully deserves the name of evolutionary aesthetics plays a fundamental role in his conception of sexual selection.

It is evident that for Darwin sexual selection is an aesthetic selection. "Sexual selection implies that the more attractive individuals are preferred by the opposite sex".²³ "When we see many males pursuing the same female, we can hardly believe that the pairing is left to chance - that the female exerts no choice, and is not influenced by the gorgeous colours or other ornaments with which the male is decorated".²⁴ "When we behold a male bird elaborately displaying his graceful plumes or splendid colour before female..., it is impossible to doubt that she admires the beauty of her male partner. [...] [W]ith great majority of animals,... the taste for the beautiful is confined, $[\ldots]$ to the attractions of the opposite sex".²⁵ In his analyses of behaviour of many species of animals, including humans, Darwin repeatedly remarked upon the fact that differences in their ornamentation and looks are essential for the constitution of their sense of beauty. "If all our women were to become as beautiful as the Venus de Medici, we should for a time be charmed; but we should soon wish for a variety; and as soon we had obtained variety, we should wish to see certain characters a little exaggerated beyond the then existing common standard".²⁶ Darwin stresses also the role of olfactory properties and vocal performances in mating of many species, birds,²⁷ mammals,²⁸ and humans as well.²⁹

The visual, or more generally, perceptual display, performed by males for the benefit of females, is nothing but a demonstration of their desire. Male's demonstrated desire works in such a way as to excite a desire in female. From this it follows that the crucial role in reproductive success, which is a good striven for

²⁷ *Ibidem*, pp. 407–408.

²¹ C. Knight, 'The Bloodiest Revolution', *Tikkun. A Bimonthly Jewish Critique of Politics, Culture & Society*, May/June (1992), p. 89. Knight's conception, drawing on P. Turke's evolutionary theory of sexuality, has been developed in his *Blood Relations: Menstruation and the Origins of Culture* (Yale 1991).

²² Aristotle, *Methaphysics*, 980a.

 $^{^{23}}$ Ch. Darwin, $Descent \ of \ Man...,$ p. 375.

²⁴ *Ibidem*, p. 375.

²⁵ *Ibidem*, p. 135.

²⁶ *Ibidem*, p. 652.

²⁸ *Ibidem*, p. 588.

²⁹ *Ibidem*, pp. 632–635.

by each living being, is played by an ability to make oneself noticed by a possible mate. In this way we may be able to understand that the good of the survival promised by sex, and the beautiful, are intimately intertwined.

The theory of sexual selection and the role played by visuality in sexual species - let us here remark that the meaning of the Latin word *species* refers to the look. appearance and depiction – enabled Darwin to explain both the promiscuity and lack of discrimination of their partners on the males' part, as well as reticence of females and their stronger discrimination in selection of partners for mating. "[M]ales of almost all animals have stronger passions than the females. Hence it is the males that fight together and sedulously display their charms before females; and the victors transmit their superiority to their male offspring".³⁰ Males are by nature more promiscuous and less discriminatory, and they will rarely refuse a union with any partner which makes herself available: "the male is generally eager to pair with any female".³¹ This is due to the fact that it is in their interest to propagate their genes as widely as possible. Females, in their turn, are both more reticent in their demonstrations of desire and much more choosy, for the burden of rearing the offspring resulting from sex is usually left to themselves only. Yet they are not immune to desire, nor quite helpless; they have a great power of exerting a choice for one among the suitors: "they can tempt the men whom they prefer, either before or after marriage".³² From this we may infer that, at least among humans, very few males will be able to contain themselves when confronted by a skilful demonstration of desire on the female's part: few things are more arousing for human males than a demonstration of female's desire. We may also add that few things are more putting off for a human male than female's ridicule of him, or her demonstration of dislike or repulsion of him.

It is worth stressing that, according to Darwin, the females' choice is dictated to them by their ability to discriminate the best, i.e. most healthy and promising male from the array of contenders to their sexual favours, the goodness of the partner being assessed by her primarily on the basis his looks or his other outward features. In this way, again, we see a close connection between sensuality and sexuality: an ability to perceive is of paramount importance in our orientation in the space of possible sexual relations, in the same way as it fundamental to our orientation within physical space³³. It appears, then, that the very concept of beauty that has been ingrained by nature in sexual animals is instrumental in organising and regulating their reproduction and survival, and thus is the most rudimentary form of biophilia.³⁴

³⁰ *Ibidem*, p. 236.

³¹ *Ibidem*, p. 261.

³² *Ibidem*, p. 668.

 $^{^{33}}$ The intimate relationship between vision and sexuality has been argued for by S. Freud in *The "Uncanny"* (*Writings on Art. And Literature* (Stanford 1997), pp. 193–233): "A study of dreams, fantasies and myths has taught us that anxiety about one's eyes, the fear of going blind, is often enough a substitute for the dread of being castrated. The self-blinding of the mythical criminal, Oedipus, was simply a mitigated form of the punishment of castration – the only punishment that was adequate for him by the *lex talionis"* (*ibidem*, p. 106).

 $^{^{34}}$ The concept has been formulated by E. Fromm in his *The Heart of Man* (New York 1964) and subsequently developed by E.O. Wilson in his *Biophilia* (Cambridge 1984); see also E.O. Wilson, S.R. Kellert, *The Biophilia Hypothesis* (Washington 1995).

Evolutionary Aesthetics

Our sexuality made us social beings. Our sensuality played a crucial role in regulating both our sexuality and our sociability: it made us moral beings. It should not surprise us, then, that the fundamental connection between the beautiful and the good has been recognised by the Ancient Greeks who used the expression of *kalokagathia*, which signified for them what is beautiful and good, also as a term of moral approval. In their deep wisdom the Ancient Greeks had seen the beautiful and the good as originally and inextricably intertwined. The close relationship between the good and the beautiful is still retained in some languages, as it is demonstrated by some usages of the adjective "beautiful" instead of "good" in many languages, Polish among them.

Attempts to recover this original connection between the good and the beautiful within the evolutionary theory, known as bio-aesthetics or evolutionary aesthetics, are relatively recent.³⁵ They have enabled us better to understand the human proclivity to engage in the activity known as art which is as ancient as humans themselves.³⁶ The most comprehensive and sophisticated attempt to argue for the validity of Darwin's ideas to the understanding and interpreting of human arts has been formulated by Denis Dutton.³⁷ Dutton's book is a systematic, comprehensive and most refined of the latest conceptions in evolutionary aesthetics understood as the evolutionary philosophy of arts.

Its beginning is highly interesting. Two Russian artists, Vitaliy Komarov and Alexandr Melamid, living in the US, have supervised a global survey on human aesthetic preferences, run in ten different countries, geographically distant from each other. According to the results of the survey, most people questioned, irrespective of the place of their education, tended to demonstrate aesthetic fondness of a spacious landscape which included representation of greenery, water, animals and humans. The landscape which attracts universal aesthetic approval consists of an open space covered by low (or mowed) grass, interspersed by trees and bushes; there is also in it a natural water reservoir, like a pond or a lake; at least on one of its sides the landscape opens a vista toward a distant horizon; it also includes evidence of the presence of animals and birds, various plants, including fruit plants and flowers.

In 1993 both artists have presented a painting entitled America's Most Wanted which, according to their research, reflected the most universal tastes of the Americans. (They have created similar paintings for other countries³⁸). The interpre-

³⁵ According to E.O. Wilson, they were pioneered by G. Smets in her Aesthetic Judgment and Arousal. An Experimental Contribution to Psycho-Aesthetics (Leuven 1973), but already T. Huxley has written that "Some day, I doubt not, we shall arrive at an understanding of the evolution of the Aesthetic faculty" (Evolution and Ethics..., p. 80). An interesting programme of evolutionary aesthetics has been outlined by A. Comfort in Darwin and the Naked Lady. Discursive Essays on Biology and Art (New York 1962), where he claims that "there can be a biology of art, as there is a biology of digestion and of motoring" (*ibidem*, p. 2).

³⁶ Cf. e.g. E.O. Wilson, Consilience. The Unity of Knowledge (New York 1998), ch. 10. Cf. also, e.g. E. Voland, K. Grammer (eds.), Evolutionary Aesthetics (Heidelberg 2003).

³⁷ D. Dutton, Art Instinct (New York 2009).

 $^{^{38}}$ Photographs of their paintings may be viewed at: http://www.diacenter.org/km/home page.html.

tation of the survey, together with satirical paintings created by artists, which caricatured what may be seen on almost every wall calendar, have caused a great debate among aestheticians and philosophers of art; the debate was focused upon the problem of relativism and universalism in understanding of art and its canons.

Dutton argues that human reactions to landscapes, puzzling in their universality, are a symptom of deeply ingrained atavisms in human beings, formed in them in the period of Pleistocene, i.e. from 1,8 million to 11 thousand years ago. In this great time span, whose length may be conveyed by the fact that the oldest known records made by humans are barely five thousand years old, one species of the primates, *Homo erectus*, has been transforming itself through a protracted evolutionary process into human species. Those instincts reflect deeply rooted preferences of the hominids which played crucial role in their survival in these evolutionary distant times. "Preferred landscapes are characterized by coherence and legibility: terrain that provides orientation and invites exploration. A sense of a natural or man-made path is the most common cue for exploration, along with a surface that is even enough for walking. Appealing landscapes frequently center attention, therefore, on a riverbank that disappears around a bend or a walking path that leads into hills or down to a fertile valley. Provision of a focal point or glimpse of a horizon increases the intelligibility of a scene, and hence visual appeal".³⁹ Such views offer a "prospect and refuge",⁴⁰ i.e. things of importance for the survival of creatures which are to become humans and which only recently have learned to walk on the hind limbs; thanks to this achievement their front limbs could have been employed to purposes other than walking.

On the basis of the collected evolutionary facts and his knowledge of the prehistoric and historic art, Dutton argues in favour of the universality of human aesthetic tastes, connecting them with the universality of challenges for human survival and with the developing human capability of understanding how to achieve aims conducive to survival. Among universal features of art Dutton lists the imaginative capabilities of creators embodied in their works; ability to excite emotions by means of their works; and technical skills of the artists; ability of the created work of art to please the spectator, etc. All this has become possible because that one species of the primates has adopted the erected mode of walking. This development has been possible also because of the rapid increase of the volume of its brain, more than three times larger than the brain of the most intelligent of all other primates; this growth has occurred during the period of a climatological and geological relative stability, characteristic of the Pleistocene.

In his evolutionary-aesthetic speculations Dutton devotes much space to the pleasure taken by humans in telling stores, true and fictitious; the joy drawn from telling and listening to stories is common among the most primitive and the most sophisticated people, the young and old. In this context it is worth reminding that the fundamental role of story-telling in human life has been noticed by Alasdair MacIntyre; in his moral philosophy he formulated the narrative conception of human self which stresses the regulative, in moral sense, character of the narratives:

³⁹ D. Dutton, The Art Instinct, s. 21–22.

⁴⁰ *Ibidem*, s. 22.

"[M]an is in his actions and practice, as well as in his fictions, essentially a storytelling animal. He is not essentially, but becomes through his history, a teller of stories that aspire to truth. [...] Hence there is no way to give us understanding of any society, including our own, except through the stories which constitute its initial dramatic resources. Mythology, in its original sense, is at heart of things. Vico was right and so was Joyce. And so too of course is that moral tradition from the heroic society to its medieval heirs according to which the telling of stories has a key part in education us into the virtues".⁴¹

From the perspective of Dutton's evolutionary aesthetics there are no obstacles to acknowledge the validity of MacIntyre's claims. Dutton, however, goes further and claims that both artistic structure of such narratives, as well as their themes, testify to the evolutionary background of human capability and their need to tell stories: we tell to each other about universal problems of "life, death, adventure, family conflict, justice, and overcoming adversity",⁴² in order to record, first in speech, then in writing, actions and strategies which played important role in human struggle for survival with nature. They are more or less distant echoes of collective human endeavours to survive.

The role and content of the stories told, however, cannot be reduced to the knowledge indispensable for survival. An important aspect of understanding of art outlined by Dutton is the role played in the evolution not only the natural selection, described by Darwin in his work on origin of the species, but also the sexual selection which is the theme of his book on the origin of man. It is the Darwinian idea of sexual selection that enables him to explain the richness and diversity of forms and features of life in nature, something which could not have been explained by his earlier idea of the natural selection. Similarly Dutton argues that sexual selection is responsible both for the amazing ornaments of the creatures endowed in this way by nature, but also for the fact that it finds among humans a continuation in human desire to decorate themselves as well as their environment in order to arouse the interest of potential sexual partners and to attract their attention, and themselves. In other words, art in one of the most important factors organizing human sexual traffic which means that it takes part in regulating this key sphere of human life, and, in consequence, of many other spheres of human life represented in works of art which tell stories about most important human problems.

It may be said that Dutton's naturalist perspective is capable of explaining the evolved need for art which accompanies humans from the moment they emerged and which played an immensely important role in their evolution. It would seem also that such a perspective, even if it is capable of explaining the primitive, folk or popular art, will be unable to explain what we call the high art. Yet Dutton faces this challenge as well; the concluding chapter of his book contains an excellent and persuasive explanation of features of the greatest human masterpieces from

⁴¹ A. MacIntyre, After Virtue. A Study in Moral Theory (Notre Dame 1984), p. 216 (Polish transl. Dziedzictwo cnoty. Studium z teorii moralności, trans. A. Chmielewski (Warszawa 1996), pp. 383–384).

⁴² D. Dutton, *The Art Instinct*, s. 5.

a point of view which remains both naturalist and evolutionary. According to the narrative in this chapter, nobility and greatness of the works or art, which have been placed by Clive Bell on the "cold and white peaks of art", may also be explained by reference to deep human instincts formed during the Pleistocene, and ingrained in human nature by forces of nature and social factors which, on the one hand, were formed in the pre-human herds on the basis of the encoded instincts and, on the other, have modified and amplified them.

It is worth reminding in this context Richard Shusterman's project of pragmatist aesthetics. Shusterman, like Dutton, argued in favour of a unified understanding of art; his approach enabled him to recognise products of both high and low culture as genuine works of art. His essay on *Fine Art of Rap*⁴³ is a bravado argument in favour of this claim. The fact that both Shusterman and Dutton have reached similar conclusions has a distant yet I believe an important reason in the fact that the pragmatist philosophy – including John Dewey's philosophy of art, which has been an important inspiration for Shusterman – has evolved under Darwin's influence.

This account of the main argument of Dutton's book does not do full justice to its richness and charm. For Dutton has included in his work, among others, an interesting definition of art which is an outcome of a critical reflection upon other such definitions; he also defined in a clear way the phenomenon of kitsch; he pointed out features which makes us qualify some works of art as genuinely great; he also included into his narrative fascinating stories of the forgers of art and diagnosed the sources of their mischievous success. Dutton's book is undoubtedly excellent, for it is masterly written and is a testimony to his immense erudition in art – high and low, elite and popular one – as well as to his excellent knowledge of Darwin's ideas which form the core of his argument. One has to remember, however, that his approach, as the approaches adopted in most of the books written in the English-speaking countries, is informed by the specific meaning of the term "aesthetics", deeply ingrained in the English language usage. Specificity of this usage delimits the meaning of the term "aesthetics" to the domain of art. There is, however, an another tradition which perceives aesthetics as a domain of reflection upon all aspects of the perceptible, and all functions played by perceptibility in the life of human beings. I am personally in favour of this second, much wider understanding of aesthetic reflection; for this reason I would like to draw attention to the issues which are not taken up by Dutton though he often touches upon them.

In this context it has to be remembered, however, that the ability to perceive beauty cannot be confined to the ability of perceiving beautiful objects belonging to the world of arts. Perception of beauty has never been innocent. On the contrary, the rules establishing the ideal of beauty are one of the most repressive means of control in social relations. For beauty has its other, negative side, ugliness. Ugliness, in a strict analogy to beauty, never works as a term of aesthetic

⁴³ R. Shusterman, Fine Art Of Rap, [in:] R. Shusterman, Pragmatist Aesthetics. Living Beauty, Rethinking Arts (Oxford 1992; Polish transl. Estetyka pragmatyczna. Żywe piękno i refleksja nad sztuką, trans. A. Chmielewski et al. (Wrocław 1998)).

only, but of moral disapproval as well. We may appreciate its power by realising that those who are not aesthetically liked are branded as ugly, and, as a consequence, are not chosen, and often actively scorned and rejected. This leads not only to their sexual frustration, but also to their social denigration. Reciprocally, it generates misogyny or misandry, as the case may be, and sometimes leads, on the part of the rejected, to violent revenge for having been rejected. Eventually it may also lead to the extinction of the genetic line of those unfortunates who were not fancied by anyone. In this sense the aesthetic ideal of beauty has not only an intrinsic moral, but also a social and political dimension.

One has to stress also that, against Darwin's Victorian view of femininity, women have always been conscious of the power invested in them by both their ability to say "no" to men, as well as by the effect which a demonstration of their desire exerts upon them. Rules sanctioning their power over men are known to have been spontaneously established in all cultures.⁴⁴ In the civilised world, the traditionally accepted ways of demonstration of the female desire are now being additionally enhanced and controlled, standardised and diversified, yet most of all ruthlessly exploited by the fashion, cosmetics, popular music and pornographic industries. Moreover, due to their extensive use of the ubiquitous audiovisual media, the demonstration of female desire – male desire being perceived by our predominant culture as too obscene to be publicly depicted – is intensely and extensively employed in advertising, and is being put to work to enhance the aims of a variety of businesses. This adds an important economic dimension to evolutionary aesthetics.

Challenges and Inspirations

Darwin's evolutionary theory continues to be challenged as an inadequate explanation of the world of nature and humanity, especially by the advocates of creationism and followers of its more refined version, intelligent design theory. The Archbishop of Vienna, Cardinal Christoph Schönborn has intervened against a view that the Roman Catholic Church has acquiesced in the acceptance of evolutionary theory or that its perennial teaching has somehow become compatible with evolution: "Evolution in the sense of common ancestry might be true, but evolution in the neo-Darwinian sense – an unguided, unplanned process of random variation and natural selection – is not. Any system of thought that denies or seeks to explain away the overwhelming evidence for design in biology is ideology, not science". Invoking the Catechism of the Church, John Paul II, and Benedict XVI, Archbishop Schönborn reminded the faithful that the evolution of living beings, of which science seeks to determine the stages and to discern its mechanism, presents an internal finality which arouses admiration. "To speak of chance for a universe which presents such a complex organization in its elements and such marvelous finality in its life would be equivalent to giving up the search for an explanation of the world as it appears to us. In fact, this would be equivalent to admitting

⁴⁴ S. Blaffer Hrdy convincingly challenged the Darwinian Victorian view of women as by nature passive and monogamous in her *The Woman that Never Evolved* (Cambridge 1981; Polish transl. Warszawa 2005).

effects without a cause. It would be to abdicate human intelligence, which would thus refuse to think and to seek a solution for its problems". 45

It has been argued⁴⁶ that the creationist beliefs can essentially be reduced to four claims. The first claim asserts, rather unsurprisingly, the existence of an omnipotent God. According to the second, even if the explanation of development of life has been elaborated more or less adequately by Darwin, it is God who has directed or otherwise intervened in the natural processes through which every living species has come about. Thirdly, creationists and Intelligent Design advocates agree that the human species has certainly been designed and created by God, and that it is an unfounded claim to assert that humans may have evolved from humanoid ancestors. The above claims are supported by the fourth, most interesting one, according to which some beings, humans especially, are endowed with irreducible complexity which could not have been the outcome of the purposeless and contingent processes of natural selection of creatures which turn out to be the fittest to survive in a changeable environment. In an elaborate analysis of the latest attempts to reconcile the scientific, i.e. Darwinian explanations of the natural world, with a variety of religious outlooks, Jerry A. Coyne concluded that "[a]ttempts to reconcile God and evolution keep rolling off the intellectual assembly line [...] because the reconciliation never works".⁴⁷

Interestingly, however, the evolutionary theory has been claimed to be inadequate not only by religiously inspired writers but also by a number of scholars of other persuasions. Most notably Karl Popper, the philosopher and methodologist credited with having provided the best available criterion for scientificity, namely the principle of falsifiability, once argued that Darwinism is not falsifiable, and thus is unscientific.

According to Popper, Darwinism is a theory which enables us to explain how it came about that the great variety of forms of life, some of them very complex and refined, have originated from very few of them, possibly even from a single, very primitive organism. Evolutionary theory capable of explaining the generation of a multitude of forms of life from a very limited number of them (he calls it an evolutionary tree of life) is based, according to him, on four hypotheses. The hypothesis of heredity asserts that offspring of all living creatures resemble "fairly faithfully" their parents. The claim of variation allows for the occurrence of "small" variations in the offspring. The hypothesis of natural selection asserts the existence of a mechanism of control of the offspring by the elimination of the unfit; one of its consequences is that, given the relative stability of the environment, only small variations, caused by small mutations, are allowed to survive, whereas the monstrous mutations turn out, as a rule, unfit and thus lethal. The fourth element of Darwinism according to Popper is the claim that variability is being kept with some limit by natural selection.

Popper went on to say that Darwinism, as it methodologically stands, is not testable because it is unable to predict the outcome of the processes it assumes

⁴⁵ C. Schonbörn, 'Finding Design in Nature', New York Times, July 7 (2005).

⁴⁶ J.A. Coyne, 'Seeing and Believing. The Never-ending Attempt to Reconcile Science and Religion, and Why It Is Doomed to Fail', *The New Republic*, Wednesday, February 4 (2009).

 $^{^{47}}$ Ibidem.

to be taking place in nature, and for this reason it cannot really explain them. Darwinism is "disappointing" in its predictive and explanatory power for it does not explain in a "scientific way" the phenomenon of adaptation. He says that our usage of the terms "adaptation" and "selection" is that we can say that if a species were not adapted, it would have been eliminated by natural selection. And if a species has been eliminated, it must have been ill adapted to the conditions. Adaptation or fitness is defined by modern evolutionists as survival value, and can be measured by actual success in survival, and "there is hardly any possibility of testing a theory as feeble as this".⁴⁸

Despite his own criticisms, Popper awarded Darwinism the status of a metaphysical research programme and claimed that Darwin's theory is invaluable. It has been for him invaluable to the extent that he called his own ideas – in epistemology, methodology, and the philosophy of language – "evolutionary".⁴⁹ Following in Darwin's footsteps he claimed, for example, that from amoeba to Einstein is just one step, the difference being that amoeba, if commits a mistake in its tentative moves within its world, will be eliminated, whereas humans, thanks to their evolved capabilities, their capability to reason especially, will be able to allow their misguided hypotheses to be eliminated in their stead.

We are thus justified to conclude that Popper's methodological misgivings against Darwinian theory have best been answered by Popper himself.⁵⁰ We are justified too in saying that Darwin's open framework for an explanation of the emergence of humans has provided us with effective tools to explain human reason as a wholly natural phenomenon, and how it may have evolved unaided by anything but natural forces.

Darwin concluded his *Origin of Species* on a very aesthetical note: "There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one: and that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, are being, evolved".⁵¹ There indeed is an unsurpassed grandeur in his view of humans as beings crafted by natural forces alone.

⁴⁸ Cf. K.R. Popper, Unended Quest. An Intellectual Autobiography (Chicago 1976), pp. 167–180.

⁴⁹ Cf. K.R. Popper, Objective Knowledge. An Evolutionary Approach (Oxford 1979), especially chapters 2 and 7.

⁵⁰ In fact, Popper, has explicitly retracted his view concerning the alleged unfalsifiability of the theory of evolution; *cf.* his *Natural Selection and Its Scientific Status* being his First Darwin Lecture delivered at Darwin College, Cambridge, published in *Dialectica*, 32 (1978), republished with minor omissions in *Popper Selection*, edited by D.W. Miller (Princeton 1985, pp. 239–246). Francisco Ayala has informed me that Popper's views on the methodological status of the theory of evolution, expressed in his *Unended Quest*, have been strongly criticized during a conference organized by Ayala and Theodore Dobzhansky in late 1960's, to which Popper has been invited.

⁵¹ Ch. Darwin, The Origin of the Species..., pp. 459–460.