Metaphysics or Modernity?

Contributions to the Bamberg Summer School 2012

Edited by Simon Baumgartner, Thimo Heisenberg and Sebastian Krebs



Schriften aus der Fakultät Geistes- und Kulturwissenschaften der Otto-Friedrich-Universität Bamberg

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Metaphysics in the work of Charles Darwin

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It is not hard to see how two visions of nature are intertwined in Darwin's Journal of Researches: one vision, the province of romantic authors depicting the sentiments awakened by certain landscapes, the other, the domain of natural scientists describing the world without reference to the aesthetic qualities of the scenery. Nevertheless, analyses of this double perspective in Darwin's work are relatively rare. Most scholars focus on Darwin, the scientist, and more or less ignore the aesthetic aspects of his work. Perceiving the gradual transformation of Darwin's world view, however, depends on analyzing the two different modes in which Darwin approached and perceived the world. While one can, on occasion, find commentaries on the beauty of the natural world in Darwin's early work, the passage of time produces a modification in the naturalist's manner of perceiving nature. This does not, however, mean that Darwin ceases to find beauty in nature; on the contrary, the disenchantment, in Max Weber's words, that Darwin's theory produces should not be understood in a pejorative, but rather in a literal sense. The theory of evolution, in effect, divests nature of its magical character and begins to explain it in terms of natural selection, according it, in the process a new and more intense attraction. In the present work, the metaphysical implications of this new vision of the world are analyzed through the eyes of its discoverer.

1. Darwin, religion and landscape

Formerly I was led by feelings, such as those just referred to (although I do not think that the religious sentiment was ever strongly developed in me), to the firm conviction of the existence of God, and of the immortality of the soul [...] I well remember my conviction that there is more in man than the mere breath of his body. But now the grandest scenes would not cause any such convictions and feelings to rise in my mind. It may be truly said that I am like a man who has become colour-blind (Darwin 1887: 311-312).

As demonstrated by, among others, Daniel Dennett's book *Darwin's Dangerous Idea* (Dennett 1995) or by the disputes in the United States

 $^{^1}$ All citations from $\it Life \ and \ letters \ of \ Charles \ Darwin. Including an Autobiographical <math>\it Chapter \ are \ from \ Volume \ I.$

over Intelligent Design theory, analyzing the metaphysical implications of Darwin's theory remains relevant to philosophical debates. The quote that opens the present work refers to the relation between the emergence of religious sentiment, produced by the aesthetic perception of landscape, and the disappearance of the same caused by the growth in scientific knowledge about nature. One may, in turn, directly link Darwin's confession to a series of metaphysical questions surrounding Darwinism, such as religious beliefs (Creationism), the revision of received ideas with the aim of attributing meaning to human history and human existence, the aesthetic perception of nature, or the problem of the existence of God. Dennett, in effect, makes an oblique reference to these questions when he argues that Darwinism functions as a "universal acid" that corrodes all received metaphysical ideas.

There is little consensus regarding the relevance of theological questions in understanding the Darwinian theory of evolution. In describing aesthetic marvels, Darwin occasionally uses language that implies a foundation in religious belief. As Phillip R. Sloan points out, however, such language is "not religious in the traditional sense", as it is "devoid of references to 'God', 'creation', 'providence', 'design', or the other categories of traditional theology" (Sloan 2001: 261). On the whole, then, one can say that Darwin's writings contain metaphysical references, but display no clear connection to traditional theology.

After Darwin's voyage in the *Beagle* (1831-1836), the influence of Thomas Robert Malthus's writings gave him a new vocabulary that distanced itself from Humboldtian² nature. This period was of great

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² Alexander von Humboldt's accurately taken nature data and his detailed landscape descriptions make the reader form an almost inevitable association between him and Charles Darwin, one of his followers. Both authors started research voyages to know in detail the natural world, and it is a remarkable fact that Darwin carried with himself a copy of Humboldt's *Personal Narrative* (1814) taken as a helpful reference for his own research. Darwin's *Journal of Researches* preserves Humboldt's descriptive style, which is characteristic for its adoption of two different ways of analyzing and describing the elements of nature. On the one hand, Humboldt adopted the Romantic Movement's delight for nature and, consequently, he also maintained the romantic descriptive style of nature's elements. This particular descriptive method is easily recognizable, since it shows the beholder's subjective point of view and, therefore, the feelings that some scenes or elements of nature arouse in the observer. On the other hand, one recognizes in Humboldt's texts the descriptive method that natural sciences use to analyze the

significance for Darwin. His understanding of nature became more complex and, prompted by the work of Malthus to conceive of nature as a selector, his naturalistic ideas began to acquire a direction slightly different from that of his predecessor Humboldt, though preserving traces of Humboldt's influence. As Sloan puts it:

The synthesis of Darwin's complex body of readings and reflections finally took shape in the remarkable first drafts of his transformist theory in 1842 and 1844, the first texts to employ the concept of "natural" selection. In these texts we can also see the beginnings of the interplay of the "Humboldtian" and "Malthusian" conceptions of nature (Sloan 2001: 264).

Darwin's *Journal of Researches* (1839) clearly reveals this presence of two intertwined visions of nature: one is that of Romantic authors who want to convey the feelings that the observation of certain types of landscapes produces, and the other is that of natural scientists who describe the world without reference to the aesthetic qualities of the landscape. While one may characterize Darwin's early view of nature as pantheistic, one cannot say the same of the conception of nature present in the writings dating from the period of the On Origin of Species (1859), where the influence of Malthus is visible, and where the enumerative and schematic description of observations predominates. During the earliest years in which Darwin was engaged in formulating his theory, his writings, according to Sloan, display a conception of nature that resembles Spinoza's notion of natura naturans and natura naturata³, and it is in those writings that one can perceive the link between the sense of the sublime in Darwin and the figure of God (with the understanding, as noted above, that this "God" is not the God of traditional theology). Connecting Darwin's ideas with the Spinozistic notion of nature, Sloan makes the important claim that in Darwin's writings,

These [the complex forms and adaptations found in nature] are not contrivances imposed by an external creator on a passive material nature in the tradition of

environment. This descriptive style is formed by the objective information with which the observer aims to devise a complete view of nature, leaving aside the personal repercussion.

3 One could refer to *natura naturans* as "active nature" (God) and to *natura naturata* as "passive nature" ("all that follows from the necessity of the nature of God"). These two states of nature can, on the one hand, be defined separately but, on the other hand, should be understood as two complementary elements (Spinoza 1989: 25-26).

British natural theology. They are rather properties that emerge from the immanent constructive activities of nature itself (Sloan 2001: 268).

After all the references to theology, Sloan finds it necessary to qualify the term "religious":

If we define "religious" motivations to involve some kind of belief in the transcendent, in an objective foundation of a moral order, and as the source of answers to the main questions of life and death, a constitutive and even religious significance in Darwin's appeal to "nature" is more plausible (Sloan 2001: 267).

One must analyze whether religious beliefs shaped the way in which the English naturalist formed an understanding of the natural environment. Sloan leans toward accepting that the transcendent had a certain influence on Darwin's ideas, causing Darwin to have a quasi-religious conception of nature:

Darwin's "nature" was something more than a mere metaphysical premise [...] it was also a source of moral order for Darwin, not in the sense of a system displaying obvious design and contrivance, but as a lawful system on which one could rely for ethical norms, serving as the source and foundation for life. To this extent, we can affirm that cognitive premises of a quasi-religious nature do indeed play a significant role in Darwin's science (Sloan 2001: 269).

Seeing Darwin's conception of the quasi-religious nature as something that comprises a system of laws and ethical norms that establish the basic principle of life, one can conclude that this conception plays an important role in Darwin's scientific work.

David Kohn, in *Darwin's Ambiguity: The Secularization of Biological Meaning*, argues for a certain ambiguity in Darwin's metaphysics-related writings. On occasion, Kohn notes, references to the Creator coexist with a ridiculing of the special creation doctrine; similarly, the same letter may contain both the affirmation and the denial of God. Kohn sees, then, a naturalist with a dual character:

So we continue to have these conflicting portraits: Darwin as conforming Victorian theist – the last of the natural theologians – and Darwin as religious radical who recovered the deistic tradition of the enlightenment and had a special role in establishing the independence of scientific naturalism and the secularization of the modern world view (Kohn 1989: 218).

According to Kohn, the important fact is that Darwin's search for a scientific theory of biological origins unfolds in a specific theological context (Kohn 1989: 223). The context appears to influence Darwin's thought and, according to Kohn, this influence can be seen during the first years in which Darwin developed his theory – although one can, at the same time, detect a certain materialism in his ideas. These two aspects of the naturalist add ambiguity to his texts.

One can regard Darwin as a materialist, but this need not lead one to consider him an atheist, given that he saw no problem with affirming that the laws of nature may be established by God – an impersonal God, undefined and synchronized with nature itself. Darwin's work consists in explaining a natural order that implies the existence of a Creator (Kohn 1989: 238).

This double aspect is the reason that Darwin's thought is compared to Victorian Romanticism, which was also pulled in two different directions at once: the "lyrical materialism" (Beer 2009: 44) of William Wordsworth and the idealistic theology of Samuel Taylor Coleridge. Moreover, there is in Darwin a new approach to the sublime and the beautiful from the perspective of naturalism, as Kohn explains:

Darwin can be shown to preach a naturalist reconciliation of the sublime and beautiful. When he lifts up the vision of a natural world created and finely balanced by selection, he captures the heightened religious emotions of a doxology and appeals to a spirituality dislocated by the Victorian crisis (Kohn 1989: 234).

The sublime, characterized by a powerful and destructive nature, is in diametric opposition to the beautiful, defined more by calm than by natural force. Wordsworth's search of a conciliation between the sublime and the beautiful is brought to completion in the work On the Origin of Species, where, according to Kohn, one encounters a Darwin who is no longer the young Humboldtian naturalist of the Journal of Researches, but rather a mature scientist capable of finding the balance between the beautiful and the sublime for which Wordsworth yearned (Kohn 1989: 235).

A close reading of the *Journal of Researchers* reveals the existence of two descriptive tendencies, two forms of approximating nature that appear to be intertwined, forming a stable equilibrium – and that are, for Darwin, complementary. Darwin achieves a new form of perceiving

nature, a form that is inevitably rooted in Romanticism, but that, little by little, distances itself from an *enchanted* (Weber) vision of nature, arriving at explanations of the way nature works that do not draw on the transcendental. Nevertheless, despite possessing an explanation of nature based on his theory of evolution, Darwin continues to perceive beauty in nature.

In my view, it is incorrect to claim that Darwin found himself on the fence at all times; rather, with the passage of time, Darwin refined his manner of observing nature. The increase of knowledge that resulted from his incessant observation of the environment caused Darwin to modulate his perception of the landscape. As James Paradis notes: "While Darwin's developing theories did not alter the appearance of landscape, they did ultimately alter what Darwin saw," (Paradis 1981: 105). Paradis locates the difference between Naturalism and Romanticism in the perception of nature, and comments that "as [Darwin's] concept of nature became increasingly intellectual and abstract, his representations became less traditional and emotional" (Paradis 1981: 107). I suspect that, contrary to Paradis's argument, knowledge intensifies the aesthetic experience, making it denser, more human, more serious, and more profound. This is exemplified in the last paragraph of Darwin's *On the Origin of Species*.

2. The entangled bank

Darwin closes the *Origin of Species* with the following words:

It is interesting to contemplate a tangled bank, clothed with many plants of many kinds, with birds singing in the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each other in so complex a manner, have all been produced by laws acting around us. These laws, taken in the largest sense being Growth with Reproduction; Inheritance which is almost implied by reproduction; Variability from the indirect and direct action of the conditions of life, and from use and disuse: a Ratio of Increase so high as to lead to a Struggle for Life, and as a consequence to Natural Selection, entailing divergence of Character and the Extinction of less-improved forms. Thus, from the war of nature, from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly follows. There is grandeur in this view of life, with its several powers, having been originally breathed by the Creator 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, and are being evolved (Darwin 1876: 429).

According to Kohn (1997), the "entangled bank" metaphor does not pertain only to the last paragraph of *On the Origin of Species,* but is, rather, developed over the course of the *Journal*. Kohn argues that in the *Journal*, Darwin exhibits a variety of strong responses to natural scenery: in describing his experiences in Tierra del Fuego, he emphasizes decadence and desolation, where, in describing the Brazilian forest, he sees grandiosity. Nevertheless, both scenes are conducive to the creation of the entanglement metaphor:

The Darwinian fixation with entanglement, both in Tierra del Fuego and Brazil expresses a struggle towards the sublime that is rooted in Milton's language (Kohn 1997: 26).

It is worthy of note that Kohn, besides discussing the "entangled bank" metaphor, also traces the roots of the "wedging metaphor" that appears in the *Transmutation Notebook* of 1838, describing it as the initial formulation of the thoughts expressed in the last paragraph of *On the Origin of Species*, where it is finally united with the "entangled bank". As Kohn puts it:

My claim is that the birth of the entangled bank in 1859 was already foreshadowed in the *textual framing* of the 1838 wedging metaphor [...] the wedging metaphor and the entangled bank prove to be intimately related in the *Origin*. In the end, they are almost one [...] their commonality derives from Darwin's powerful attachment to his version of the romantic aesthetic (Kohn 1997: 40, italics in original).

Recalling the earlier discussion on the linkage of the sublime with natural force and of the beautiful with calm, Kohn adds one last thought regarding Darwin's metaphors. He argues that in both metaphors, one

⁵ The "wedging metaphor" derives from Darwin's comment about the necessity of finding a structure that could be adapted to change. As Kohn puts it: "The balance of death and destruction with life and growth – the oeconomic balance sheet of nature – finds its meaning in adaptative change" (Kohn 1997: 37).

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⁴ Kohn refers to the following quote: "Among the scenes which are deeply impressed on my mind, none exceed in sublimity the primeval forests undefaced by the hand of man; whether those of Brazil, where the powers of Life are predominant, or those of Tierra del Fuego, where Death and Decay prevail" (Darwin 1913: 533-534).

can detect a kind of preparation of the textual frame, with Darwin inviting us to contemplate the natural landscape that he sees, so that he can then explain the workings of what he observes. In other words, one passes from the beautiful to the sublime within one thought.

The final fragment of *On the Origin of Species* displays aesthetic sensibility in a "disenchanted" sense, though one should not interpret that "disenchantment" as a negative process. One can see how Darwin continues to perceive beauty in nature ("endless forms most beautiful and most wonderful have been") despite having uncovered its workings. In Darwin's case, there is no "disenchantment" in the Weberian sense – quite the opposite. Offering a theory that explains the unknown aspects of the evolution of species prompts Darwin to approach nature with new eyes, causing him to marvel at it even more than before he had discovered his theory of evolution through natural selection. George Levine (2008) terms this process "secular reenchantment" and notes:

The excitement that follows upon understanding the instincts that drive birds to migrate (and this requires no mystification or invocation of transcendental spirit), the astonishment that follows upon recognizing the overwhelming complexity of the eye's functioning (even despite the flaws in the mechanism that are clear evidence that there is no intelligent design behind the construction of the eye) [...] these and all the various knowledges that scientific study of nature and the human has been producing are elements of new forms of enchantment (Levine 2008: 28).

I find this approach to Darwin's perception of nature appealing, and therefore I venture to refine somewhat the claims of Paradis, discussed earlier: Darwin's theory of natural selection may not modify the appearance of landscape, but it does modify the representational instances (previous information, theoretical explanations, etc.) that always accompany human experience. This allows Darwin to see in the landscape that which the Romantics cannot see. In other words, Paradis's argument could be amended in the sense that while Darwinian evolutionism does not modify the "physical appearance" of the

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⁶ In fact, George Levine (Levine 2008: 31) argues that seeing Darwin's work as devoid of affection for the world is an incorrect way of interpreting it: "The tendency to understand Darwin's world as providing no affective or even rational compensation is [...] another of the 'misuses' – although perhaps an inevitable one – of Darwin'.

landscape (a claim that is trivial, given that no theory can accomplish that), it does substantially reshape what the brain or mind sees. In other words, it does not alter what the eyes see, but it does change the human perception of the images on the retina; that is, it changes the interpretation of the landscape, the human sensations, the "apperception" (Leibniz) — and, finally, the internal experience, including the aesthetic experience.

3. Darwin's Autobiography and the loss of aesthetic taste

One of the aspects of the *Autobiography* that has received the most scholarly attention is Darwin's statement that he is losing his aesthetic taste. This loss begins with poetry, previously a source of pleasure to Darwin.

The naturalist notes in his autobiography that he used to read poetry. But he also confesses that he has completely lost the taste for it over the years: "Later in life I wholly lost, to my great regret, all pleasure of poetry of any kind" (Darwin 1887: 33). Darwin states that his taste for poetry lasted until he was thirty years old, but that since that age, poetry began to bore him to the point of nausea:

Up to the age of thirty, or beyond it, poetry of many kinds, such as the works of Milton, Gray, Byron, Wordsworth, Coleridge, and Shelley, gave me great pleasure, and even as a schoolboy I took intense delight in Shakespeare, especially in the historical plays. I have also said that formerly pictures gave me considerable, and music very great delight. But now for many years I cannot endure to read a line of poetry: I have tried lately to read Shakespeare, and found it so intolerably dull that it nauseated me (Darwin 1887: 100-101).

Besides poetry, art and music had also given pleasure to Darwin. Yet in his old age, Darwin had so completely lost his taste for most art forms that he even felt that a part of his brain – the part related to the aesthetic (the higher tastes) – had atrophied; only some feeling for the beauty of scenery was left, and even that was reduced. Darwin finds this loss very strange:

I retain some taste for fine scenery but it does not cause me the exquisite delight which it formerly did [...] This curious and lamentable loss of the higher aesthetic tastes is all the odder, as books on history, biographies, and travels (independently of any scientific facts which they may contain), and essays on all sorts of subjects interest me as much as ever they did. My mind seems to have

become a kind of machine for grinding general laws out of large collections of facts, but why this should have caused the atrophy of that part of the brain alone, on which the higher tastes depend, I cannot conceive (Darwin 1887: 101).

Darwin's words are not simply a dispassionate acknowledgement of a loss of interest in poetry, painting, and music. Instead, Darwin conveys his grief at the loss, which he suspects may have further consequences:

The loss of these tastes is a loss of happiness, and may possibly be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional part of our nature (Darwin 1887: 102).

This "enfeebling of the emotional part of our nature" is what seems to worry Darwin most; this is hardly surprising given its importance for Darwin in previous years. In addition to the explicit emotion that he himself in the *Journal of Researches* described himself feeling, his son, Francis Darwin, recounts the childlike manner in which his father observed and admired flowers:

I used to like to hear him admire the beauty of a flower; it was a kind of gratitude to the flower itself, and a personal love for its delicate form and colour. I seem to remember him gently touching a flower he delighted in; it was the same simple admiration that a child might have (Darwin 1887: 117).

This same admiration, that Francis Darwin considers childlike, can also be seen, though not in exactly the same form, in a passage in the *Journal of Researches*, where Darwin describes how his experiences in the Brazilian forest produced in him a feeling that there is more to human beings than the corporeal. By contrast, in the later *Autobiography* he describes himself as, in a way, color-blind. If the scenes of the Brazilian forest in years past had prompted in him a sense of belief in something more than the corporeal, with the passage of time, these scenes, so closely connected to a belief in God, ceased producing that effect in Darwin. The naturalist proclaims that the same scenes would no longer call forth in him the same sensations of the sublime, that is, of sentiments related to the divine.

It is possible that Darwin understood, or intuited, that the aesthetic sense, like the moral instinct, also has bio-evolutionary roots, so that the connection with the sublime, that aesthetic theories since Plato had affirmed, would be lost. It is known that Darwin lost at least the onto-

theological significance of the beauty of natural landscapes – that is, he no longer perceived them as *vestigia Dei* (traces of the Creator). This onto-theological perception of the landscape is inseparable from the traditional pre-Darwinist aesthetics: beauty as a manifestation of the sublime (divine) in man and in nature.

Various authors have contributed towards an explanation of Darwin's loss of aesthetic taste. John A. Campbell notes that two explanations have dominated attempts to solve the question of Darwin's affective decline. On the one hand, Campbell suggests that decline has been attributed to Darwin's overconcentration on scientific studies, and, on the other, to his loss of religious faith (Campbell 1974: 159). Two types of evidence, states Campbell, have been used to support these claims: first, the testimony of the Autobiography, and second, the limited relevance that Darwin in The Descent of Man (1871) accords to emotion and imagination in man's future evolution. In Campbell's view, however, these interpretations of Darwin's affective decline are based on an incorrect or partial reading of Darwin's texts, and are in conflict with explicit evidence in those texts. Although there is some generally accepted evidence, such as the above-mentioned aspects of the Autobiography and The Descent of Man, Campbell considers that claims regarding Darwin's affective decline are made without sufficient attention to other relevant pieces of evidence.

Campbell bases his theory on a distinction between art and nature. Campbell's argument is that while it is evident that Darwin suffers a substantial loss of interest in art – and indeed, affirms that loss himself in the *Autobiography* – no comparable loss of interest in nature can be detected in Darwin's texts, nor does Darwin claim to suffer such a loss.

Darwin's affective responsiveness to nature did not undergo a decline at all comparable to his decline of interest in art [...] One need not read far in any of Darwin's works to see that one of the most striking aspects of Darwin's emotional response is his manner of describing the natural world. The language of Darwin's descriptions betrays a relationship with the objects of his study that is personal and affective. In his earliest work his praise of nature is expectedly exuberant (Campbell 1974: 161-162).

To be sure, even if Darwin's manner of observing and describing nature did not become completely unemotional, it did nevertheless change: "[a]s he grew older, Darwin's response, without ceasing to be intense,

became less effervescent and more serene" (Campbell 1974: 163-164). Nevertheless, this merely indicates a change in the character of Darwin's emotional sensibility to nature, not a disappearance of that sensibility.

Campbell next makes an attempt to discover whether Darwin's affective response to nature had religious roots. Comparing Darwin to the natural theologian William Paley, Campbell states that they share "a delight in the particular, but the difference between them is that for Darwin the particulars of nature have very little connection with God" (Campbell 1974: 166). And yet, faced with the Brazilian jungle, Darwin had referred to the existence of something more than the corporeal in a human being. Viewing these types of situations as general and the observation of a flower as something particular, Campbell argues that for Darwin, God was a "God of things in general" (Campbell 1974: 167).

In looking for the source of the delight that Darwin takes in nature, Campbell links Darwin's love of nature with his conception of science, suggesting that the emotional force of the first years of the naturalist's work might almost have eclipsed the scientific rigor of his observations, whereas in his later years the situation was the reverse (ibid.). According to Campbell, however, Darwin achieved a balance between science and emotional delight in nature – a balance rooted in his humanist vision of nature (Campbell 1974: 168). Darwin demonstrates this humanism in not evincing any discomfort with comparing human beings with the most humble organisms imaginable, even expressing admiration for such organisms. This acknowledgment of apparently insignificant organisms is what makes the human being worthy of participating in the organic flow of life. Darwin, therefore, says Campbell, "humanizes knowledge through emotion" (Campbell 1974: 173).

Having established Darwin's continued emotional appreciation of nature, Campbell locates the source of his complete dedication to science in his later years in the serious illness that he suffered and that left him without the energy to pursue other studies, including artistic ones: "Darwin's decline of interest in literature and music was not so much part of a larger hostility to art as a response to a life situation which did not allow him a reserve of emotional energy sufficient for its demands" (Campbell 1974: 173).

In *Charles Darwin, the Anaesthetic Man*, Donald Fleming begins his explanation of Darwin's loss of interest in the aesthetic by describing

the tradition of "dissociation of knowledge and sensibility; fact and affect" that, it is argued, leaves people with only the capacity to know and not the capacity to feel (Fleming 1961: 220). In addition, Fleming focuses on the influence of religion: according to him, it influenced Darwin in the worst possible sense, being an important factor in Darwin's loss of interest in aesthetics. Fleming asks: "Why did Darwin experience this atrophy of the aesthetic instincts?" (Fleming 1961: 225) and locates the key to the puzzle in Darwin's experience with the feeling of the sublime, which links his loss of aesthetic taste to his views on religion.

Fleming states that although Darwin never precisely defines what he means by "the sublime", it is clear that "[t]he sublime was associated by Darwin with an upwelling from the depths of the spirit that appeared to set reason aside and prevail over it" (Fleming 1961: 226). Fleming emphasizes the role of various fundamental pillars like scenic grandeur, religion, and the sublime: "Great art by association with scenic grandeur, scenic grandeur with religion, and all three with the sublime, became part of a single universe of experience" (ibid.). It is not difficult, therefore, to detect in Darwin's texts a connection between the feeling of the sublime, achieved through linking art with nature, and religious feeling.

In Fleming's view, if Darwin came to lose his taste for the aesthetic, that was due to his insistence on distancing himself from the religious (Fleming 1961: 227), an insistence that is clear in his works. Given the connection between religious feeling and the feeling of the sublime, Fleming considers it logical that Darwin's effort to gradually distance himself from religion be accompanied by a symmetrical distancing from the sublime and from everything derived from the aesthetics of landscape. There is, also, a further question. Referring to feelings, Fleming notes: "Intense feeling was undesirable in Darwin's own experience as exacerbating his already keen sensitivities [...] Therein lay a tremendous ambiguity at the very heart of Darwin's position" (p. 229). That ambiguity is embedded in the theory of natural selection, which collides with the search for and broadening of the good in religion because it emphasizes "pain, suffering, frustration, and unfulfillment" so that "[a]ny good that comes of it, comes by evil" (ibid., italics in original). Fleming describes Darwin's view of this as follows:

To him [Darwin], a God that dwelt in natural selection would be the worst of all possible Gods. For the proprietor of the universe to have to seek for a mere preponderance of good over evil in the world that he made, which was the best that could be said for any progress attained by natural selection, was monstrous to Darwin's eyes (Fleming 1961: 231).

Darwin, furthermore, finds no solace in the claim that suffering is a means to moral improvement: that claim, for him, only makes it all the more unacceptable to think that a benevolent God should have created millions of animals below humans in the animal scale, and these can obtain no moral improvement from the suffering that is supposed to offer an opportunity for it (ibid.).

One might even state that Darwin's rejection of art is due to the fact that natural selection presupposes the very opposite of nature understood as a work of art. Fleming, however, argues that the source of that rejection is more appropriately located in Darwin's determination not to be an accomplice to evil by accepting the dominion of God (Fleming 1961: 232). If one understands the sublime as the act of observing the relentless power of nature, always seen from a distance, that produces the feeling of human insignificance in the face of natural force, it seems logical to argue that Darwin rejects the possibility of accepting the existence of a God that imposes evil from above:

The chief lie of lying religion for him was that evil could have been inflicted from on high instead of simply occurring. If, by access to the sublime, he should assent to this lie, his act of charity to mankind for uncovering the harsh necessity of natural selection would fall to the ground (Fleming 1961: 233).

The only possibility of incorporating art into Darwin's system would, therefore, be the discovery of a constructive role for religion in the evolution of humanity:

The iron band that clamped art, sublimity, and religion together in his own experience would have meant that the obvious way to build art into his system would be to assign a powerful role to religion as a constructive force in the development of mankind (Fleming 1961: 235).

4. Conclusion

A variety of explanations have been offered for Darwin's loss of aesthetic taste. Yet one should not, perhaps, understand this loss as the complete

elimination of aesthetic taste, but rather as a modification produced by the move from an *enchanted* explanation of the workings of nature to an explanation that does not require a mystical element. Darwinian evolution represents one of the most prominent milestones of the process of desacralization or secularization of the world that modern culture entails. Desacralization, however, is not specifically Darwinian as a whole, only in its application to living things and particularly to the human condition.

A scientific naturalism such as Darwinian evolutionism implies a complete conceptual revision of basic ontological presuppositions relating to nature ('species', 'substance', 'natural law', 'teleology', etc.). These modifications have correlations in nature perceptions, including their aesthetic perception and, therefore, also in nature descriptions. Contrary to what is sometimes claimed, the secularized view of the world that Darwinism promotes carries with it neither a devaluation of moral or aesthetic sentiments nor the dehumanization of existence.

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This collection of essays originated in the Summer School 'Metaphysics or Modernity?', which was held at the University of Bamberg in August 2012. Designed as a forum for graduate students in philosophy, the Summer School brought together a highly diverse group of young academics who — more often than not — came from utterly different schools and traditions of thought.

This pluralism is reflected in the pages of this book. While the volume is roughly divided into two halves – one with a more historical focus, the other with a more systematic focus – the reader will find an unusually wide array of topics and questions treated here. Since the aforementioned pluralism was one of the main strengths of our Summer School, this is something in which we take much pride.



