model of the presentation made by the clinician for the patient, but applied to ethical problems. Although this perspective seems simplistic, if considered from a philosophical perspective, Mihaela Frunză notes that it is convenient and easy to use.

The attributions of ethics committees are numerous and range from solving the employees' ethical dilemmas, to legal advice or funds allocation. However, three broad areas in which these committees operate can be identified. Firstly, there is the evaluation of the individual cases, but the author warns against the risk of discrimination of patients in favour of the hospital. Another area of action of the ethics committees is the education of the employees, namely the dissemination of ethical knowledge to the persons involved in providing medical services. This is the area in which ethics committees would work most effectively. Once again, Mihaela Frunză emphasizes the importance of philosophical training in order to meet these educational responsibilities of ethics committees. A narrower range of actions of ethics committees is policy advice. In this case, whether we are talking about ethics committees in hospitals, or national or trans-national ethics committees, the author gives evidence of and analyzes issues such as: conflicts of interest, the representation within the committees of different directions in bioethics, the sponsorships of committees, etc. A justification of the fact that Mihaela Frunza's approach highlights the shortcomings of these structures is provided by her remark that it is preferable to know the possible problems before actually confronting them. She refers to the Romanian context where such institutions are incipient and fail to fulfil the actual need of ethical expertise. Mihaela Frunză points out once again the double confusion: on the one hand, between ethical expertise and competence in a field of research and, on the other hand, between ethical expertise and the "ethical wisdom" inherited from ancestors.

The complex analysis proposed by the author fully supports the conclusion formulated at the end of the volume, emphasizing that ethical expertise is an autonomous field that requires a systematic training, a field characterized by the fact that "it is justified and justificatory, argumentatively communicable and transmissible within advanced forms of teaching." ¹

Darwin and Darwinism in the 21st Century – From Past to Future – Review –

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Darwin and Darwinism, signed by Dr. Petru Derevenco, physiologist, honorary member of Medical Science Academy of Romania, is part of the Romanian literature

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¹ Ibid., 182.

devoted to evolutionism as a guidance paper that addresses the general public, wishing to emphasize the importance of Charles Darwin's studies in the context of current scientific research on anthropology, genetics, molecular biology and human social sciences.

The work is divided into 12 chapters, following the sequence of life, personality and work of Darwin's predecessors, contemporaries and followers of the scientist, the theory of evolution and guidelines of post-Darwinism, aspects of development psychology, the relation between evolution and biology, evolution and culture, evolution and creationism, and finally some aspects of Darwinism in Romania.

In the foreword, the author mentions the reasons for the publication of this study: personal passion for the study of human adaptability in the biological and cognitive conditions in terms of physiology, quiet anniversary of Darwin in 2009 in Romania, and the neglect of the study of evolutionary theory in Romanian education.

Darwin - from mediocre student who catches insects and rats to the ambitious researcher

In the first part of the book, the author presents some biographical landmarks of the naturalist. C. Darwin was born on 12.02.1809 in a Unitarian Christian family, his father – physician – being characterized by an authoritative attitude towards his family, but from a professional perspective he had a special relationship with his patients. Darwin turned out to be a mediocre student, interrupted his studies at the Medical University Of Edinburgh due to his disgust for dissection procedures, then he continued to study theology at Cambridge University, but left it off, starting the journey on the Beagle boat. "You will be a disgrace for youself and your family", Darwin's father always reproached. Darwin's laxity might be explained by his confidence in his father's wealth. 1

Outlining his psychological profile, we mention certain self-characterizing quotes that Darwin used: "I think I am superior to most ordinary people due to the fact that I can observe things that attention easily misses. [...] my love for natural science was steadfast and burning. But this pure love was much helped by my ambition to win over my colleagues." or "A scientist should have no desires, no emotions, but a heart of stone." 2

By studying Darwin's biography from a psychological point of view, the author completed an unusual "observation sheet" with numerous medical history events occurred in childhood (autism, obsessive-compulsive behaviour), adolescence (chest pain and palpitations - probably due to the growth process), during the expedition (sea sickness, fever, digestive disorders) or adulthood (paroxysmal episodes of vomiting, chemical poisoning, gastric ulcer).

At his arrival from his trip with Beagle, on returning from the Beagle voyage, aimed at mapping the coasts of continents, Darwin published his results in zoology (5 volumes), geology (3 volumes), and a series of monographs on *Cirripedia* (4 volumes). Two thirds of the time the ship was stationed at various ports, at which Darwin was responsible for collecting fossils and zoological and botanical parts.

"Origin of Species" – Darwin's magnum opus, it was called the "gospel of the devil." This expression opens a very controversial subject: was Darwin an atheist or not?

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¹ Petru Derevenco, *Darwin și darwinismul* (Darwin and Darwinism) (Cluj-Napoca: Casa Cărții de Știință, 2011), 9–10.

² Petru Derevenco, *Darwin şi darwinismul*, 12–13.

³ Petru Derevenco, *Darwin și darwinismul*, 27.

Some creationists support the hypothesis that Darwin tried to defend himself when he was accused of attacking The Creator, God.¹ In a letter, Darwin says: "My theology is in some trouble, I cannot believe the Universe as the result of blind events and yet cannot find any proof of intent [...] in the small things."² On the other hand, in the *Origin of Species* Darwin says: "To my mind it accords better with what we know of the laws impressed on matter by the Creator, that the production and extinction of the past and present inhabitants of the world should have been due to secondary causes, like those determining the birth and death of the individual". At a certain point Darwin declared: "To my astonishment the ideas [of evolution] caught like fire in the stubble. From them, certain individuals formed a religion." In *The Descent of Man, and Selection in Relation to Sex* an individual's faith is presented as being the largest difference between man and animal, but he finds it impossible to argue that this belief is innate or instinctive.⁵

In the chapters on the predecessors, contemporaries and followers of Darwin, the author carried out a review of the main names related to the theory of evolution and presented, for each, an enlightening summary of scientific activity.



Şerban Savu, The Ice Hole, 2011, 91 x 130 cm, oil on canvas

¹ Eduard Recordon, Philippe Tapernoux, *Biserica sau adunarea* (Church or congregation) (Dillenburg: Gute Botschaft Verlag, 1993), 362.

² Petru Derevenco, *Darwin și darwinismul*, 17.

³ Charles Darwin, *The Origin of Species* (New York: P.F. Collier, 1909), 527.

⁴ Petru Popovici, *Biblia este totuși adevărată* (Bible is still true) (Timișoara: Editura Lumina lumii, 1966), 174.

⁵ Petru Derevenco, *Darwin și darwinismul*, 30.

In "Three geniuses", the author attempts to identify possible influences of Darwin's theory on Nietzsche, Einstein and Hawking. Possible influences are predominantly motivated by the fact that the three deny the existence of creative Deity. In the context of influential science it would have been interesting a reference to I. Newton, even though he had been dead for more than one hundred years when Darwin published his research results. At one time, Newton was asked how he would repopulate Earth if life would be destroyed. "It takes a Creator" was his reply. Asked why he did not publish these reflections, Newton said: "I have published enough so people can see clearly what my opinion is". Newton saw the world as a static place while Darwin saw it as a continuous process. From Darwin onwards, we have no fixed, static science, but everything is in continuous change.²

In "Theory of evolution in culture", the author presents the concept of "meme", a term developed by Richard Dawkins. "Meme" means an informational replicator entity, cultural equivalent of the gene (e.g. the alphabet, calendar, music, fashion mode, etc.). This way, we can explain the evolution of ideas by the quasi-natural selection in a certain environment. In other words, it is the cultural equivalent of evolutionary theory.

Darwinism – from past to future

In the chapter dealing with the relationship evolutionism-creationism, the author believes that the evidence collected, and his daughter's death, led him to move from faith in God to sceptical agnosticism. The chapter is well documented and provides a significant amount of information to form a picture on the subject.

In a letter, Darwin says: "I have no intention to write as an atheist. I see no reason why man or animal could not be produced [..] by other laws and all these laws were designed by an intelligent creator [...]. But the more realistically I think, the more I feel lost "³

Creationism can take more than one shape: scientific creationism, progressive creationism (validates Darwin's theory and integrates scientific information from geology and cosmology) and theist evolutionary (said that matter was created by God and evolution processes occur later).

The minuses that the evolutionary theory had in the causality chain are outlined and studied by creationists. They argue that the scientific law of cause and effect, which is the first cause of life, must have been alive. However, they sustain that the reproduction of bio-genesis in a lab is impossible due to the analytical complexity of live matter and the experimental barriers in synthesizing life.⁴

In "Darwinism in Romania" the author expresses concern about the biology curriculum of secondary education, which does not include the theory of evolution. Results of a survey conducted in 2007 show that 73% of Romanian students from high-

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¹ Richard Westfall, *Never at Rest* (Cambridge University Press, 1980).

² Friedrich Cramer, *Haos şi ordine – structura complexă a viului* (Chaos and order – the complex structure of the living), ed. Apostol Andrei and Marius Stan (Bucharest: Editura BIC ALL, 2001), 210, 212.

³ Derevenco Petru, *Darwin și darwinismul*, 129.

⁴ Henry M. Morris, *Creationismul științific* (Scientific Creationism), ed. Iosif Țon (Societatea Misionară Română, 1992), 48, 49, 51.

school believe that man was created by God.¹ The author expresses appreciation for biology textbooks of the Communist period, despite the fact that they contain paragraphs that depart from the presentation of scientific objectivity, making objectionable statements: "The term evolution is the opposite of creation. [...] Plants and animals have not been created by a supernatural force. [...] There was no moment of creation of the living world."² Darwin does not make statements of this type, leaving much space for interpretations about the moment of creation. Given the theological weaknesses of Darwin's theory, in respectable scientific papers statements like "The idea of evolution is imposed as an indisputable fact [...]"; [there are] "facts that undoubtedly prove the objective nature of the process of biological evolution"; there is a need to "increase the power of persuasion"³ can't be made. The interest of political doctrines hidden behind communism during the presentation of this theory in textbooks is obvious and I think that the pillars of the regime were seen as more important than purely scientific theory. The statement "There is a danger that without Darwin the Romanian school would return to the Middle Ages⁴" is not substantiated.

Since the beginning, Darwin's theory was marked by teleological gaps. The advocates of this theory have tried to minimize and replace these with philosophical ideas born of a hybrid theory, philosophy of science. Over time, scientific research either approved of the theory or denied it. The fact is that there are still many gaps. In the future, discussions for or against evolution should be based on objective interpretation of clear scientific results obtained from studies conducted in a methodologically transparent way.

Cramer believes that modern Darwinism eliminated teleology from biology. Darwinian theory provides a closed explanation, the causality is not clearly seen, since such a theory can be neither proved nor rejected. Evolution could occur in other ways, and it does not provide a forecast for the future.⁵

Criticism

We applaud the author's work, who collected a rich up-to-date bibliographic material, from which he extracted the essence of his study in a small amount of pages, and the information was presented in a simple and accessible way. For the most part, events and research have been presented objectively, the author leaves the reader to form his own opinion on those related, but there are exceptions.

I mention the lack of a critical apparatus with good references footnoted. It may develop as a confusing factor, the reader cannot understand if it's the writer's opinion exposed or a bibliographic resource.

I recommend consulting this paper to those who wish to form a general opinion about Darwinian theory and its development until about 2011.

¹ Derevenco Petru, *Darwin si darwinismul*, 151.

² Petre Raicu, Bogdan Stugren, Doina Duma, Nicolae Coman, Florica Mărăscu, *Biologie – genetică și evoluționism* (Biology – Genetics and evolutionism) (Bucharest: Editura Did. și Ped., 1986), 117.

³ Nicolae Botnariuc, *Biologie generală* (General biology) (Bucharest: Editura Did. și Ped., 1979), 88.

⁴ Derevenco Petru, *Darwin şi darwinismul*, 151.

⁵ Friedrich Cramer, *Haos și ordine – structura complexă a viului*, 211.