


UDC: 7203.01

LBC: 63.3(2)6-7; 65.497; 71; 71.1

MJ № 462

 10.33864/2617-751X.2026.v9.i2.90-107

THE THEORY OF EVOLUTION BETWEEN PROOF AND CRITICISM: A PHILOSOPHICAL READING OF THE LIMITS OF SCIENTIFIC KNOWLEDGE

Nassira Boutaghane*

Chafia Benamar**

Abstract. The theory of evolution that Charles Darwin has put, it became a very central turning point in the arise and the growth of biology science, especially in its part which is related to living things. This theory helped to transfer the study about human from the places which are metaphysical or religious to the scientific experimental field, when it sees the living creature as a result of a process of development which is governed by the laws of nature and of natural selection. And from his book "*The Origin of Species*" (1859), and after that in a way more clear in "*The Origin of Man*" (1871), Darwin put the human inside the natural order of the living beings, and by this thing, he destroyed the old idea which sees human as different in existence or separated from the other creatures. This view made a way for a new branch of anthropology called "biological anthropology" or sometimes "natural anthropology," and it is concerned with human from the side of his body structure, his genetic story, and his evolutionary origin, and it depends on comparison with the other main primates. And maybe the most thing which was special in this changing is that the Darwinism did not only effect in the tools of the scientific research, but caused a constant argument, intellectual and scientific, and did not stop, about deep philosophical questions which have relation with meanings like creation, belief, awareness, culture, and the morals. So, the human is not anymore seen as a being separated from the nature, but as a being submitted to its laws, and always changing, and also controlled by conditions that are environmental and historical and very complex. Therefore, the Darwin theory made new knowledge bases, and made biology to look again to the definition of living being, and it also made the question of existence come again in the light of development, not in the light of fixedness.

Keywords: evolution and Darwinism, biological anthropology, human and living organisms, philosophical transformation in biology

* Dr., Mohamed Lamine Debaghine Setif 2 University; Algeria

E-mail: n.boutaghane@univ-setif2.dz

<https://orcid.org/0009-0002-2257-6556>

** Dr., University of Algiers 2 – Abou El Kacem Saadallah; Algeria

E-mail: chafia.benamar@univ-alger2.dz

<https://orcid.org/0009-0003-4666-0311>

To cite this article: Boutaghane, N., & Benamar, Ch. [2026]. THE THEORY OF EVOLUTION BETWEEN PROOF AND CRITICISM: A PHILOSOPHICAL READING OF THE LIMITS OF SCIENTIFIC KNOWLEDGE. "Metafizika" journal, 9(2), pp.90-107.

<https://doi.org/10.33864/2617-751X.2026.v9.i2.90-107>

Article history:

Received: 14.02.2025 **Revised:** 08.03.2025 **Accepted:** 23.11.2025 **Published:** 15.06.2026



Copyright: © 2025 by AcademyGate Publishing. This article is an open access article distributed under the terms and conditions of the CC BY-NC 4.0. For details on this license, please visit

<https://creativecommons.org/licenses/by-nc/4.0/>.

ТЕОРИЯ ЭВОЛЮЦИИ МЕЖДУ ДОКАЗАТЕЛЬСТВОМ И КРИТИКОЙ: ФИЛОСОФСКОЕ ОСМЫСЛЕНИЕ ГРАНИЦ НАУЧНОГО ЗНАНИЯ

Нассира Бутаган*

Шафия Бенамар**

Абстракт. Теория эволюции, предложенная Чарльзом Дарвином, стала решающим поворотным моментом в становлении и развитии биологической науки, особенно в области изучения живых организмов. Эта теория способствовала переносу исследования человека из метафизических и религиозных рамок в сферу эмпирического и экспериментального научного познания, рассматривая живые существа как результат постепенного процесса развития, подчинённого законам природы и естественного отбора. Начиная с работы Происхождение видов (1859), а затем более чётко в Происхождении человека (1871), Дарвин включил человека в естественный порядок живых существ, тем самым разрушив традиционное представление о человеке как о сущности, онтологически отличной или отделившейся от других живых организмов. Данный подход открыл путь к формированию новой отрасли антропологии - биологической антропологии, также известной как натуралистическая антропология, которая изучает человека с точки зрения строения тела, генетической истории и эволюционного происхождения, опираясь на сравнительный анализ с высшими приматами. Наиболее характерной чертой этого преобразования стало то, что дарвинизм повлиял не только на методы научного исследования, но и вызвал продолжающиеся до настоящего времени интеллектуальные и научные дискуссии, затрагивающие глубокие философские вопросы, связанные с такими понятиями, как творение, вера, сознание, культура и мораль. В результате человек перестаёт рассматриваться как существо, отделившееся от природы, и понимается как часть природного мира, подчинённая его законам, постоянно изменяющаяся и формируемая сложными историческими и экологическими условиями. Таким образом, теория Дарвина заложила новые эпистемологические основания, побудила биологию пересмотреть определение жизни и вновь поставила вопрос существования в контексте развития и изменчивости, а не неизменности и фиксированности.

Ключевые слова: эволюция и дарвинизм; биологическая антропология; человек и живые организмы; философская трансформация биологии

* Д-р., Университет имени Мохамеда Ламина Дебагина, Сетиф 2; Алжир

E-mail: n.boutaghane@univ-setif2.dz

<https://orcid.org/0009-0002-2257-6556>

** Д-р., Университет Алжира 2 имени Абу Эль-Касема Саадаллы; Алжир

E-mail: chafia.benamar@univ-alger2.dz

<https://orcid.org/0009-0003-4666-0311>

Цитировать статью: Бутаган, Н., & Бенамар, Ш. [2026]. ТЕОРИЯ ЭВОЛЮЦИИ МЕЖДУ ДОКАЗАТЕЛЬСТВОМ И КРИТИКОЙ: ФИЛОСОФСКОЕ ОСМЫСЛЕНИЕ ГРАНИЦ НАУЧНОГО ЗНАНИЯ. Журнал «Metafizika», 9(2), с.90-107.

<https://doi.org/10.33864/2617-751X.2026.v9.i2.90-107>

История статьи:

Поступила: 14.02.2025 Переработана: 08.03.2025 Принята: 23.11.2025 Опубликовано: 15.06.2026




Copyright: © 2025 by AcademyGate Publishing. This article is an open access article distributed under the terms and conditions of the CC BY-NC 4.0. For details on this license, please visit

<https://creativecommons.org/licenses/by-nc/4.0/>.

UOT: 7203.01

KBT: 63.3(2)6-7; 65.497; 71; 71.1

MJ № 462

 10.33864/2617-751X.2026.v9.i2.90-107

TƏKAMÜL NƏZƏRİYYƏSİ SÜBUT VƏ TƏNQİD ARASINDA: ELMİ BİLİYİN SƏRHƏDLƏRİNƏ FƏLSƏFİ YANAŞMA

Nasirə Butaqan*

Şafiya Benamar**

Abstrakt. Çarlz Darvin tərəfindən irəli sürülmüş təkamül nəzəriyyəsi biologiya elminin yaranması və inkişafında, xüsusilə canlı varlıqların öyrənilməsi sahəsində mühüm və həlledici dönüş nöqtəsi olmuşdur. Bu nəzəriyyə insanın öyrənilməsini metafizik və dini müstəvidən elmi-eksperimental sahəyə yönəlmiş, canlı varlıqları təbiət qanunları və təbii seçmə mexanizmi ilə idarə olunan inkişaf prosesinin nəticəsi kimi izah etmişdir. Darvin Növlərin Mənşəyi (1859) əsərində və daha sonra daha aydın şəkildə İnsanın Mənşəyi (1871) kitabında insanı canlılar aləminin təbii sisteminə daxil etmiş, bununla da insanı mövcudluq baxımından digər canlılardan fərqli və ya onlardan ayrı hesab edən köhnə təsəvvürü aradan qaldırmışdır. Bu baxış bioloji antropologiya (bəzən təbiət antropologiyası adlandırılan) adlı yeni bir antropologiya sahəsinin formalaşmasına zəmin yaratmışdır. Sözügedən sahə insanı onun bədən quruluşu, genetik tarixi və təkamül mənşəyi baxımından araşdırır və əsasən ali primatlarla müqayisəli tədqiqatlara əsaslanır. Bu dəyişimin ən diqqətçəkən cəhətlərindən biri ondan ibarətdir ki, darvinizm yalnız elmi tədqiqat metodlarına təsir göstərməmiş, eyni zamanda yaradılış, inanc, şüur, mədəniyyət və əxlaq kimi anlayışlarla bağlı davamlı intellektual və elmi mübahisələrə səbəb olmuşdur. Bu müzakirələr günümüzədək aktuallığını qoruyub saxlamışdır. Nəticə etibarilə insan artıq təbiətdən ayrı bir varlıq kimi deyil, onun qanunlarına tabe olan, daim dəyişən və mürəkkəb ekoloji və tarixi şərtlər tərəfindən formalaşdırılan bir varlıq kimi dərk edilir. Beləliklə, Darvinin təkamül nəzəriyyəsi yeni bilik əsasları formalaşdırmış, biologiyamı canlı anlayışını yenidən nəzərdən keçirməyə vadar etmiş və mövcudluq məsələsini sabitlik deyil, inkişaf və dəyişmə prizmasından yenidən gündəmə gətirmişdir.

Açar sözlər: təkamül və darvinizm; bioloji antropologiya; insan və canlı orqanizmlər; biologiyada fəlsəfi transformasiya

* Dr., Məhəmməd Lamine Debaghine adına Setif 2 Universiteti; Əlcəzair

E-mail: n.boutaghane@univ-setif2.dz

<https://orcid.org/0009-0002-2257-6556>

** Dr., Əlcəzair 2 Universiteti – Abou El Kacem Saadallah; Əlcəzair

E-mail: chafia.benamar@univ-alger2.dz

<https://orcid.org/0009-0003-4666-0311>

Məqaləyə istinad: Butaqan., N., & Benamar, Ş. [2026]. TƏKAMÜL NƏZƏRİYYƏSİ SÜBUT VƏ TƏNQİD ARASINDA: ELMİ BİLİYİN SƏRHƏDLƏRİNƏ FƏLSƏFİ YANAŞMA. “Metafizika” jurnalı, 9(2), səh.90-107.

<https://doi.org/10.33864/2617-751X.2026.v9.i2.90-107>

Məqalənin tarixçəsi:

Daxil olub: 14.02.2025 **Yenidən baxılıb:** 08.03.2025 **Təsdiqlənib:** 23.11.2025 **Dərc olunub:** 15.06.2026



Copyright: © 2025 by AcademyGate Publishing. This article is an open access article distributed under the terms and conditions of the CC BY-NC 4.0. For details on this license, please visit

<https://creativecommons.org/licenses/by-nc/4.0/>.

1.Introduction

The theory of evolution by Charles Darwin constitutes a crucial turning point in the history of natural sciences and philosophical thought as well, for its effects were not limited only to the biological field, but rather extended to cause a deep transformation in our view toward man and his position in the world. Through his conception of the living being as a product of an evolutionary process based on natural selection and adaptation to the surroundings, Darwin presented a new anthropological vision that undermines the classical metaphysical conceptions which had separated man from other creatures. This Darwinian view of man has reformulated the concept of the living being, not as a fixed essence or a being exalted above the laws of nature, but as a creature subject to a long path of biological and historical transformations. In this sense, a new philosophical anthropology emerged which includes man within the process of nature and subjects him to its conditions, in contrast to conceptions that used to grant him a special ontological privilege.

2.The Foundations Upon Which the Evolutionary Understanding of Life Is Based

2.1.Genetic Modification

The theory of “the origin of living species” was completed in Darwin's mind in 1844 - in fact, he wrote it with the recommendation to publish it in case he died - but he spent fifteen years after that gathering the scientific facts to support it before it was published for the first time in 1859. Meanwhile, he published his book about the volcanic islands which he observed in 1844, then in 1845 he published his book “Journal of Researches During the Voyage of the Beagle” [al-Milīhī, 2004, p.35].

And the results Darwin reached were not a scientific luxury, nor a desire for fame or to oppose the theories of his era, but rather they came after a long journey of research and study, through which he realized with conviction that living species are subject to modification, and that the living forms present are only forms descended, through true reproduction, from other earlier forms that existed before. This is the new thing, or the revolution that turned the natural world upside down, because what was common then, and what previous scientists were accustomed to believing, is that living species are just fixed creatures with distinct traits that set them apart from one another, and these traits are hereditary, transmitted within the same species, without any change or modification affecting them.

Darwin’s vision had a big impact on the prevailing thought and the dominant culture in that period; “The Darwinian theory contributed to the development of European material thought not only as a theory of the origin of species, but as a theory that managed to give material explanations for the origin of species

in general,” [Abd al-Razzaq, 1995, p.552] thereby denying the existence of non-material phenomena. That does not mean it denies the existence of the soul, spirit, or even feeling, but it sees that these phenomena are also subject to the same general law governing other material phenomena, including the law of general transformation. It should be pointed out that Darwin was not the first to say this theory, for he was preceded by other scientists, but they were few, including Aristotle. As for “Lamarck Lamark, he is the first person whose conclusions about the subject attracted much attention. This scientist, deservedly famous in the field of natural history, published his opinions in 1801 and added much to them in 1809 in his book ‘Philosophie Zoologique,’ and after that in 1815 in his book ‘Natural History of Invertebrate Animals.’ In these works he proposed the principle that all living species, including man, have descended from other species” [Darwin, n.d., p.38].

As for the discovery of the cell, it can be counted as the strongest victory for the materialist theory, “because they considered that the cell is the basic building block of the living organism’s body, and it is the reason for evolution. Many biological ideas that were put forward during that period strongly opposed what everybody used to consider correct, and among all biologists Charles Darwin bears the greatest amount of responsibility for making the most and deepest modifications in the prevailing view among ordinary people,” [al-Ḥakīm, n.d., p.290] and the upheaval Darwin caused was not only at the biological level, but at many levels, whether in beliefs (religion), in the formation of communities, in ideas. The revolution Darwin made has no equal except the Copernican revolution, and his theory about evolution or natural selection generated strong reactions from all directions, echoes of which continue to this day. The following is a glimpse at the theory of evolution:

The owner of the theory defines evolution, or what he prefers to call natural selection, in the following way: “All animal and plant species arose and descended from other species through gradual steps” [al-Ḥakīm, n.d., p.276]. This means according to Darwin that all living species did not exist nor originate in a complete and final state from the beginning, but rather they have undergone, since the first emergence, modifications and transformations that affected their bodily and organic structure by certain factors and circumstances. Not only this, but all living species, including man, have descended from other species. He says: “*The countless species, classes, and families that inhabit the world have arisen and descended, each within its own order, from common parents, and all have been modified along the course of descent and emergence to such a degree that I embrace this view without any hesitation*” [al-Ḥakīm, n.d., p.735].

Here, we must clarify that Darwin did not say that all creatures or living species have descended from one father, but what he meant was that the living

species that share some traits have arisen and descended from a common origin and a common ancestor. For example, we have many kinds of pigeons, whether existing or extinct, and despite their differences they have all descended from one kind of pigeon, which we call the highest ancestor for these kinds of birds. Likewise for mammals and vertebrates that share a common origin. This is part of the Darwinian theory of evolution.

The other conception that this theory relies on is that all creatures and living species, including man, have undergone changes and modifications from the start, meaning since the primitive state until they have become the way we see them now. In other words, the complex and amazing structure and composition of living species that we see at present is just the result of transformations and changes that happened gradually to primitive creatures, and this evolution and development continued for millions of years until reaching the present form. Many factors contributed to this change, some related to environmental conditions, some to the living species itself. “To reach a conclusion about the origin of our domesticated animal and plant breeds which became tame, the changing conditions of life are the ones of the highest importance in producing differentiations through both the direct effect on the organism and the indirect effect by influencing the reproductive system.” [Darwin, n.d., Text 106] Darwin gives countless examples derived from his voyage on the Beagle, where he had the chance to see strange and amazing kinds and species of life. Some conclusions he presents come from his study of certain research and results by his contemporary and earlier scientists.

Almost no page from his book ‘The Origin of Species’ is without mention of some result or study made by another scientist. So his book became also a compilation of numerous theories, sometimes agreeing and sometimes disagreeing. He says for example: “As Professor Weismann insisted recently, and it appears from cases collected by Husinger, it is the result reached by Wallace, or Lamarck, or Huxley ...” Among the examples Darwin presents is the following: “Let us now turn to the flying lemur, which earlier was classified as a bat, but now it is believed to belong to the insectivorous animals. We find that it has a wide lateral membrane extending from the jaws to the tail, covering the limbs including the tongue-long fingers ... and even though there are no gradated connecting rings in the structure prepared for gliding through the air, now linking the flying lemur and the insectivores ... the connection existed in the past” [Darwin, n.d., p.286].

Another example Darwin mentioned is that he observed during his trip to the frozen polar regions naked people despite the extreme cold. He supposed that some biological modification occurred in their bodies making them unaffected by the high cold, and later it turned out that the increase in metabolic rate is the

reason, and this increase happened through modification due to environmental conditions.

2.2.Natural Selection

The diversity in life then, according to Darwin, is due to modifications and changes in inherited or behavioral bodily traits, which allow the living organism to adapt better to its surroundings. Therefore, all forms of life on earth are connected and linked to each other, and this leads us to another concept which is “natural selection” or “the survival of the fittest.” This is the backbone of Darwin’s theory of evolution, and without it the theory would have no meaning. Darwin defines natural selection as follows: “Among the many individuals belonging to any kind (animals, plants) who are born in every period, only a few of them can survive, and I have called this principle by which any slight difference, if it is useful, is preserved, the term natural selection ... but the expression often used by Herbert Spencer, the survival of the fittest, is more precise and equally suitable at times,”[Darwin, n.d., p.173] and he says elsewhere: “And to explain how natural selection works according to my belief, I ask permission to present one or two imagined illustrative examples. Let us take the case of a wolf living on preying upon various animals, hunting some by skill, some by strength, and some by speed. Let us suppose that the fastest prey, let it be a deer for example, has increased in number due to any change in the region ... under these conditions, the wolves that are faster and leaner will have the best opportunities to survive and be preserved or selected.” [Darwin, n.d., pp.173-174]

Darwin means by natural selection that it is a mechanism or a natural method that does not guarantee survival and the continuity of life except for the one who proves that he is stronger, more deserving, and is more able to cope and adapt to the environment; the others perish and he remains because he possessed a feature that made him survive. On this basis, natural selection becomes like an exam imposed by nature on living creatures, with the criteria for success being the degree of the organism’s ability to adapt and conform to the conditions and requirements imposed by the environment. The most suitable example to clarify that is the one Darwin mentioned: suppose a ship with a group of sailors is wrecked near the shore, then the chances of survival and remaining alive will belong to the sailors skilled in swimming and not the others.

So, it may be said: “that the conditions of life will not only cause the possibility for differentiation and variation, whether directly or indirectly, but they also involve natural selection, because the conditions decide whether this or that kind will remain living,”[Darwin, n.d., p.232] and natural selection does not work only according to this mechanism, but rather it is responsible for the differences found between living species, even those descending from a

common origin or belonging to the same class. "Natural selection will have mostly brought about other changes such as an increase in the antennae or mouthparts used for touch in certain insects as compensation for blindness" [Darwin, n.d., p.238]. That is, the living organism in its struggle against nature for survival prevails thanks to certain traits it possesses. These traits can be said to be suitable for the environmental conditions, and with time, these strong traits accumulate to form a new trait that is passed by inheritance to later generations. In another meaning, birds that used to possess the trait of flight (meaning they could fly) might turn into birds unable to fly under the influence of certain factors, or a type of predator may become prey.

Darwin pointed out that some turtles living on an island with tall vegetation, over time developed a higher opening in the neck, because of their constant need to use their neck to feed on these tall plants. Here Darwin adds another concept alongside natural selection which is "use," meaning frequent use of a limb may lead to its prominence and it becomes the main trait distinguishing the kind, while, on the contrary, lack of repeated use of a limb leads to its disappearance. The ostrich, for example, used to fly in the past, but settling in places where suitable food is available without the need to fly in order to search for it, caused the ostrich to lose this feature over time. "So there can be no doubt that use may make parts of our animals stronger and larger, and that non-use has led to a decrease, and that such modifications are inherited, under the influence of free nature." [Darwin, n.d., p.323].

In addition to natural selection, Darwin talks about another type of selection, which he called sexual selection, that happens between individuals belonging to the same genetic structure. "This kind of selection does not depend on struggle for survival, so it is not connected to organic beings or to external conditions, but it depends on competition among individuals belonging to a single genetic pattern, usually males ... and the result is not the death for whoever fails, but it is limited to producing few offspring or not producing at all." [Darwin, n.d., p.176].

This means that the males who possess the best traits, especially regarding their weapons and defense methods or their attractions, are the ones most able to transfer their characteristics only to their male offspring. This is what is followed today regarding hybridization, where fertilization is limited to the living species that have the best traits. "Nature then gives long periods for natural selection to do its work, but it does not give an infinite period, because since all organic beings seek to seize all available places in the system of nature, if any kind does not introduce modifications or enhancements in a way equal to its competitors, it will be eradicated." [Darwin, n.d., p.189].

Darwin was completely certain that his results would be met with astonishment, even seeming irrational, for many people to the highest degree.

He responds to that, saying: "When it was declared in the past that the sun is fixed, and the world revolves around it, the general human sense announced the error of this doctrine, but as every philosopher knows, the old adage that 'common is correct' cannot be trusted regarding science" [Darwin, n.d., p.277]. That's why it was also said that new ideas are often unacceptable until they become common.

Darwin also points out the difficulties of digestion that will face the reader when getting to know the theory of evolution. Among these difficulties is the following question: "(If species arose and descended from other species by gradual steps, why can't we see everywhere an endless number of transitional forms? Why is not nature in a state of chaos instead of what we see, with species precisely defined?)" [Darwin, n.d., p.270]. Darwin answers that extinction and natural selection work together to maintain biological balance. Without a doubt, both varieties and parent species have been wiped out according to the law of natural selection, in the same way that new species are formed, in addition to the factor of extinction. The general natural history shows that living species wiped out by extinction could not adapt and conform to environmental conditions and harsh requirements.

Darwin then believes that close species descending from a common ancestral origin, during modification, each species becomes prepared for the environmental and life conditions in which it settled, or which were imposed on it by some circumstance, and thus gets rid of or exterminates its original ancestral form.

2.3.The Origin of Man and the Missing Link

Darwin's book "The Origin of Species" never dealt at all with the emergence of man, or anything implying that man was originally an ape. This is because most critics do not bother to trace the idea or theory back to its original source, and Darwin only touched upon the issues of creation or the Creator with a few passing references, or mentioned beliefs or religions or revealed his own orientation. But the book in which he discussed the question of the origin of man is a different book titled "The Descent of Man and Selection in Relation to Sex," which he published in 1871. In it, Darwin discussed the issue of human origins and the relation between man and ape, and the book was translated by Mahmoud al-Miljī in 2005. In this book Darwin also discussed the mental abilities of man and compared them with lower animals, as well as the lineage of man.

In the introduction of this book, the translator says: "Darwin renounced Christian teachings and referred to himself as a follower of agnosticism (belief that it is impossible to know the existence of God and the nature of the origin of the universe). And although some may argue about this, it was finally proven that he was a silent atheist." [Miljī, 2005, p.58].

In this book Darwin declares openly that man and all vertebrates descend from common origins, so it can be said there is unity of origin. He says: "Man and all other vertebrate animals have been constructed on the same general plan ... so we must admit quite frankly the unity of their origin." [Darwin, n.d., p.120] We have previously said that Darwin divided species into groups: group of birds, group of reptiles, group of mammals ... Each group shares many traits among its members, such as unity of origin, or common ancestor. The vertebrate group descended from a lineage called the lemurs, and Darwin called this lineage "stem," and man belongs to the group of monkeys, which Darwin divided into two groups: Old World monkeys from which man descended, specifically to another class called "catarrhine monkeys." "So it is difficult to doubt that man is nothing but a branch of the Old World simian stem, and that, based on the viewpoint built on lineage, he must be classified with the catarrhine section." [Darwin, n.d., p.368] As for the New World monkeys, including gorillas, chimpanzees, orangutans, and tailless monkeys ... these, according to Darwin, do not belong to the Old World, but are a separate but similar subgroup. Man somewhat resembles the tailless monkeys in this group, and "we must not suppose that the similarity between man and some particular non-tailed monkeys in the previously mentioned points ... necessarily results from inherited descent from a common higher ancestor ... the great probability is that many of these similarities result from convergent differentiation." [Darwin, n.d., p.366].

But "in general appearance, we can deduce that one of the ancient members of the human-like subgroup had produced man." [Darwin, n.d., p.370] So man descends from one of the lower-level forms, and the similarity in composition and structure between man and the higher animals, especially the tailless monkeys shown in a human-like way, is a very close similarity. But if this is the case, why is man distinguished from monkeys, and how did he acquire this superiority in terms of intelligence and other abilities?

Darwin answers that all of this is by the law of natural selection: "Even in his most primitive current states, man is the most dominant animal among those that have ever appeared on this earth, and his spread is far wider than any other highly organized form, and all the others have submitted before him ... and the highest importance of these traits was confirmed by the final settlement of the dispute in the battle for life." [Darwin, n.d., p.160] Here are further quotes that clarify Darwin's position on this issue, like his saying: "Man differs clearly from all other main animals in being almost naked, yet there is some scattered hair over most parts of man's body, and soft fine hair on that of woman ... and there is little room for any doubt that the dispersed hair in this way over body parts is only leftover traces from the split natural hairy covering

of lower animals.” [Darwin, n.d., p.111] Meaning there was thick hair on man, but he lost it due to certain conditions and factors.

And what about the tail? He says: “There is a tail, even if it is not visible from the outside, present in both man and tailless monkeys similar to man, and it’s constructed on the same pattern in both.” [Darwin, n.d., p.175] But do these results Darwin reached mean that man and ape descend from a common ancestor? What about the first emergence of forms of life? Can we say there is a unity of life and unity of origin for all living species?

Darwin did not say that the origin of man is ape, as many understood, but what he stated is that man and ape descend from a common ancestor, meaning their grandfather is shared. Still, there is a missing link in the fossil record for both ape and man, that is, there are fossils not discovered yet, which might be the evidence that man’s lineage was not created independently, and the mental and intellectual and creative distinction unique to man is not enough to classify man in a rank separate from all other living creatures.

This text will clarify in some detail how man originated:

“Man has descended from a four-limbed, hairy, tailed animal, likely arboreal in its behavior, and it was a resident of the Old World. This living creature, if its complete bodily structure is examined by a natural history scholar, would be described as one of the quadrumana, with the same certainty as the most ancient ancestor of Old World and New World monkeys, the quadrumana, and all higher mammals are likely to have sprung from an ancient marsupial (pouched) animal, which in turn came from a fish-like creature. We can see, in the deep darkness of the past, that the earliest common ancestor for all vertebrate animals must have been an aquatic animal, equipped with gills, with the union of the two reproductive organs in the same individual creature, and the most important bodily organs such as the brain and the heart not completely formed or not formed at all. This animal seems to resemble the larvae of the modern sea-squirts more than any other known form.” [Darwin, n.d., Vol. 3, p.221]

As for the origin of life as a whole, meaning the primal origin from which all life emerged, Darwin always answers in a way of supposition and possibility—he supposed all evolution without a single proof, and that the original beginning of life was from a single cell, which then developed and rose to two cells and then many cells. From these, some developed like an animal tree, and some developed into a plant tree in the form of yeasts, algae, and herbs ... then Darwin supposed new organs and new creatures appeared with time ... until they reached the complicated creatures such as fish, then amphibians, then reptiles, then birds and mammals, then monkeys and man.

3.Objections to the Theory

Scientific theories do not always remain firmly established; they can be continually modified, and sometimes some are completely overturned, as happened with the theory of the centrality of the earth and with the phlogiston theory- when decisive evidence becomes available. As for the theory of evolution, what makes it especially strong and effective is the presence of many supporting evidences from diverse fields and scientific domains, among them: biology, genetics, ecology, zoology, botany, geology, paleontology, embryology, and archaeology [Smith & Sullivan, 2018, p.49].

As for biological evolution, it occupies a similar position- the disputes within evolution are about specific details, not about the fact of evolution itself. One of those disputes, for example, is about how to read the molecular clock of DNA, which can tell us how far back two different species share a common ancestor. These disputes are published and examined in peer-reviewed scientific journals, to be subjected to further research and solutions. Nevertheless, all the discussants agree that evolution is a fact [Smith & Sullivan, 2018, p.65].

What many do not know about Darwin’s book is that what it contains is just a theory he put together by his own observations, and he himself included a large number of doubts about many of its topics. Even the writer Christopher Booker wrote in the London Times about Darwin’s theory: “*It is an easy to understand theory and quickly attracts its students, but its major defect is that it is full of big and many gaps, and this was not unknown to Darwin himself*” [Galghey, 2023, p.13].

Here I would like to quote what the two scientists (Fred Hoyle) and (Chandra Wickramasinghe) said: “*The problem faced by biology is reaching a simple beginning.... The fossil remains of ancient life forms found in mountains do not reveal a simple beginning.... Therefore, the theory of evolution lacks the basic foundation necessary for it to stand*” [Galghey, 2023, p.26].

Despite many attempts by supporters of evolution, who are prominent and recognized scientists in the field, to manipulate some evidence in order to prove the correctness of the missing link or the common ancestor between man and ape- among them Ernst Mayr in his book: Ernst Mayr, What Makes Biology Unique- the oldest Homo fossils, such as Homo rudolfensis and Homo erectus, are separated from Australopithecus by a huge gap that is not bridged. How can we explain this apparent leap? Since we have no fossils that could serve as missing links, we must resort to the traditional method in historical science, which is constructing a historical narrative. We must use every conceivable piece of evidence to build a plausible scenario, then test this explanation in the light of all available evidence [Mayr, 2004, p.198].

Ernst Mayr points out that those who do not know the method of historical narrative may see it as mere guessing and unreliable. But he clarifies that this

judgment is unfair, because the narrative he presents is not based on random assumptions, but on precise and studied conclusions from the available evidence. Mayr confirms that the value of this approach lies in its testability and reviewability- it can be compared with other explanations and tested for its consistency with the data. Thus, he does not consider historical narrative to be a kind of speculation, but a fruitful and exploratory scientific method which builds the “most probable” scenario, and at the same time opens the door to new questions that would not have been thought of without this approach.

Is there any evidence supporting this belief? If what’s called the ape-man was more advanced in the evolutionary path than apes, how could this creature disappear completely without any sign of its existence, whereas apes, which are less advanced, are still living? How could the transitional link go extinct while the creatures considered lower in evolution are still present? There must be something wrong [Mayr, 2004, p.36].

One of the biggest and most important differences between chimpanzees or apes and man is the size of their brains. Most of our thoughts, intelligence, and even our motivations and personalities come from a part of the brain known as the frontal lobe. In it are centers for thinking, planning, judgment, and the use of our conscience. While our frontal lobe is large, it is extremely small or actually absent in animals. A scientific publication explained that if we were to spread out our frontal lobe, it would cover four sheets of printing paper, whereas with a chimpanzee it would cover only one sheet, and with a rat, the size would be just a postage stamp. The vast difference in the size of the frontal lobe between chimpanzee and man is sufficient evidence for the impossibility that the second evolved from the first [Mayr, 2004, p.41].

This leads us to another fundamental difference between man and animal, which is the difference in brain ability. Professor Guyton indicates this in his book: *Medical Physiology*, when he discusses the motor lobe in the human brain- a section of the brain that tells the body how to move- he says:

“The matter is entirely different when we compare the human brain with animals that rank below it; the parts responsible for movement in the human brain give it an unmatched ability to use the hand, fingers, and thumb to perform the most skillful manual tasks.” And where is the skill of the human hand compared to the hand of apes, with their short thumbs and long fingers which cannot perform tasks requiring fine manual skill? The fingers of apes are excellent for swinging from branch to branch, but threading a needle or playing the piano are impossible things in the world of apes [Mayr, 2004, p.4].

And through the example of the human hand and its wonderful complexity, it can be said that the minute structure and functional ability of the hand constitutes clear evidence of the existence of a deliberate design. One of the greatest scientists in human history, Isaac Newton, once expressed this

meaning when he said: “If I had only one proof, which is the thumb, it would be enough to convince me of the existence of God.” This statement highlights the explanatory power of scientific observation when connected to philosophy; it shows how the study of just one organ in the human body, with its intricacy and harmony, can lead the mind to think of a purposeful cause or designer behind this system, affirming that science and philosophy may meet in contemplating natural marvels to discover the deep meanings behind them.

And this means, from another angle, that there is no room for coincidence or randomness. The order in the world of living creatures appears blatantly to be the result of a conscious mind, or the result of a designer who gathered this system according to a grand plan. Even Einstein once declared: he would never believe that God plays dice with the world. This hints at the existence of a Creator, or some entity with prior intent, or at the very least, that this world cannot be the result of a cosmic dice game, or the result of a random chance! [Smith & Sullivan, 2018, p.130].

This question raised about how something complex is produced; from the mosquito to the structure of the air-breathing lungs via random evolution, is similar to asking: how could a random mixture of muscles, nerves, skin, and connective cells become the human body? Without considering as evidence the instructions manual (the DNA responsible for issuing the orders for building this body) [Smith & Sullivan, 2018, p.134].

4.Evolution and Intelligent Design

The matter may be confusing for the reader when reading the criticisms directed at Darwin’s theory regarding the spontaneous emergence of life, that is, the claim that living creatures arose from a first cell born from primitive material interactions and then developed over time. Thinkers and scientists who reject this idea do not deny evolution as a natural process, but cast doubt on the randomness of its beginning and on sheer chance being able to produce the first forms of ordered life. Nevertheless, this critical stance does not mean embracing the idea of Intelligent Design [Smith & Sullivan, 2018, p.134],

[In 1984, the roots of the theory of Intelligent Design began to appear in the book *The Mystery of Life’s Origin* by chemist Charles Thaxton and his colleagues Walter Bradley and Roger Olsen. This book presented the idea of an intelligent cause as a scientific issue in contrast to the naturalistic explanations for the origin of life.

The three researchers critiqued materialistic hypotheses for explaining the origin of life and put forward instead a hypothesis relating to the element of intelligence, which they described as the source, cause, or Intelligent Creator, though they did not mention the terms “Intelligent Design” or “Intelligent Designer.” They based this hypothesis on a distinction between two different kinds of science: one called “origin science,” which deals with singular events such as the origins of things- like the beginning of the universe or the origin of life- and another called “operation science,” which deals with repetitive phenomena subject to the laws of nature. They emphasized that, while repetitive phenomena can be subjected to laboratory testing, singular events cannot be tested in the same way since they are unrepeatable. Thus, deciding their hypotheses depends on “reasonableness” rather than testability or falsifiability. They

applied this principle to the origin of life since it is a non-repeating event, so science cannot test its theories against it.

This idea represented a development of what had been presented in the book *Scientific Creationism* a decade earlier. Thaxton and his colleagues pointed out that in many cases we attribute some events to intelligent causes, like the existence of sculptures, machines, works of art, and linguistic laws, and saw this as consistent with what DNA carries: complex informational messages. That is, it is entirely reasonable to attribute this complex structure to an intelligent cause. Thus, they assumed the existence of a Creator behind the universe and life, considering this assumption to be a reasonable viewpoint in origin science, without intending it to be scientific evidence for the Creator [Thaxton, Bradley, Olsen: *The Mystery of Life's Origin*, 1984].]

as an alternative, since the latter- as the author of “The Ten Most Common Myths about Evolution” points out in chapters five and nine- offers a metaphysical explanation that does not comply with the standards of experimental science. Thus, the follower finds himself between two opposing positions: rejecting absolute randomness on one side and rejecting the supernatural explanation on the other, in an attempt to find a middle ground that sees the emergence of life as a natural phenomenon too complex to be reduced to coincidence, and deeper than to be explained by a predetermined design.

The true emergence of the modern Intelligent Design movement actually began with the publication of the book “The Mystery of Life’s Origin” in 1984, co-authored by several writers who claimed the beginning of life on earth cannot be explained by natural causes. This was followed, in 1989, by the publication of the book “Of Pandas and People,” in which the phrase “Intelligent Design” or ID appeared for the first time. But the movement didn’t really attract public attention until Philip Johnson’s book “Darwin on Trial” was published in 1993. Because he was a law professor at one of the top educational institutions (University of California, Berkeley), he lent the movement some academic credibility. Yet Johnson was only a media agent for the movement, while the biochemist Michael Behe and the philosopher William Dembski played a major role in presenting the Intelligent Design movement as a legitimate scientific theory. Both insisted that living organisms- or parts of them- are complex structures that cannot be created by slow cumulative evolutionary processes. Instead, they scientifically claimed that those complex biological features must have been designed by an intelligent being [Smith & Sullivan, 2018, p.230].

And this new conception has asserted itself powerfully by proponents of the theory or its theorists, who believe that what living organisms evoke in terms of order and precision is not mere illusion or a visual effect, but actually reflects the existence of real design. These scientists deem biological systems to provide strong evidence for intelligent design, and they note this observation grows clearer as biological knowledge expands. In the context of scientific debate on the origins of life, these scientists oppose the Darwinian position

which holds that natural change and selection alone are sufficient to explain biological complexity, affirming that there are features in living creatures indicating true design, not just apparent or illusory design.

One of these scientists is the biologist Jonathan Wells; Wells found conclusive evidence for design in embryonic development stages and in the cell’s molecular biology [10], and through his book “Icons of Evolution”- 2000- he became an official spokesman for the effort to correct errors in biological textbooks that teach Darwinian evolution. The mathematician William Dembski also published important work on the theoretical foundations for detecting design. He wrote under the title “*The Design Inference: Eliminating Chance via Small Probabilities*”- Cambridge University Press 1998- that design can be detected experimentally; and thereby becomes part of science [Dembski & Wells, n.d., p.17].

Given the complex ways the cell follows in reading genetic information, even slight genetic changes can mean big functional and vital changes. Proteins, which are made by genes, interact with each other to form high-level functional networks, not depending only on nucleotide bases or amino acid sequences; so we cannot detect these interactions just by studying and analyzing the sequences. Thus, two organisms may possess almost identical sets of genes, positioned similarly on the chromosomes, but they express their genes in two different ways to produce two different beings.

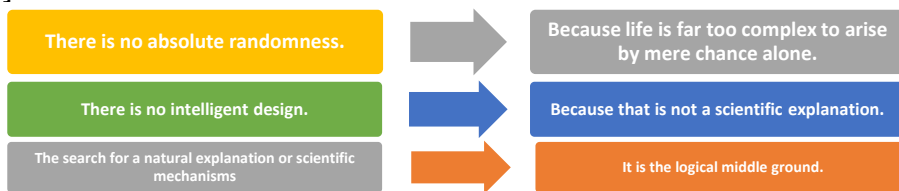
The lesson to learn from this debate is that small changes can cause important changes in biological systems- when those changes are truly the right ones. And because the gene expression system works as a whole, to re-adapt it largely would require more than just the trial-and-error style that evolution theory is known for. To re-adapt this intertwined system would require multiple consistent changes, and changes at this level indicate the presence of intelligence producing design [Dembski & Wells, n.d., pp.34-35].

But the problem raised by the theory of Intelligent Design is not just about believing and surrendering to the issue of design, but about the testability of this explanation scientifically. This belief, according to opponents, opens the door to the infiltration of metaphysical and spiritual thinking into scientific fields, as it does not search for natural and experimentally testable causes, but instead hands over everything to the Creator who stands behind every change, transformation, and development. The fact that scientists do not have a detailed answer for the evolution of every part or every organ of every living thing does not mean embracing Intelligent Design as a scientific explanation.

Evolution as a science still has many unanswered questions. This only means we have not yet discovered all the evolutionary details (step by step) relating to those complex features, like the bacterial flagellum. Most scientists consider that this requires only further research. But Behe, for example, points to this

ignorance, claiming that we should stop conducting more research and instead propose the theory of Intelligent Design as responsible for those features which could not have gradually evolved [Smith & Sullivan, 2018, p.233].

It is very easy to declare we can never understand certain sides of the natural world because they are too complex. Letting this defeatist position close the door to future scientific discoveries. Imagine with me how our understanding of the natural world would be today if people like Galileo, Newton, Darwin, and Einstein had given up on explaining the complex problems and raised their hands, announcing the existence of an Intelligent Designer as the best explanation only? Yes, surely, we would have been stuck in the darkness of the Middle Ages once again, that's all there is to it [Smith & Sullivan, 2018, p.234].



But this does not mean that scientists cannot be believers. There is, for example, a theological position known as “theistic evolution,” which allows the acceptance of the scientific understanding of evolution while preserving personal faith in God. According to this position, God does not miraculously intervene in nature to make some adjustments here and there. Rather, He created the universe and set it in motion according to the laws of nature to do its work. So there is no need for miraculous intervention from time to time to adjust or correct His creation process- including biological evolution. In other words, that God did not gift the cheetah its small black spots, nor provide the platypus with its beak. In this way, theistic evolution allowed scientists to proceed in their scientific practices while leaving miracles out of it [Smith & Sullivan, 2018, p.237].

5. Conclusion

The doctrine of evolution, in its essence, is an expression of the law of existence based on movement and change, not stagnation and stability. Creatures- from the simplest forms of life to the most advanced- are all subject to the dialectic of emergence and extinction, rise and decline, in an eternal cycle that reflects the law of evolution placed by the Creator in the universe. From this perspective, evolution becomes not just a scientific theory, but a comprehensive philosophical vision that highlights the unity of life and the integration of its manifestations. The truth witnessed by necessity and supported by reason and revelation, is that existence- in its essence- is a continuous journey toward completeness, and every ascent is a step in the path

of the Supreme Divine purpose: the manifestation of perfection in the ranks of creation. But this does not mean the theory is free from many slips.

6. REFERENCES

1. Abd al-Razzaq, A. (1995). *Philosophy of the civilizational project: Between Islamic revival and Western modernization* (Vol. 2). International Institute of Islamic Thought. (in English)
2. Bradley, W., Olsen, R., & Thaxton, C. (1984). *The mystery of life's origin*. Look. Retrieved from <http://libgen.rs/book/index.php?md5=9903F52BE6DBC56D9AB5E53FF199B12E> (in English)
3. Dembski, W., & Wells, J. (n.d.). *Design of life: Detecting the signs of intelligence in biological systems* (Trans. Musa Idris). Dar al-Kitab Publishing & Distribution. (in Arabic)
4. Galghey, R. J. (2023). *The myth of evolution* (3rd ed.). Al-Sabeel. (in English)
5. Hakim, M. A. (n.d.). *Dialectical materialism between science and philosophy*. Center for Kufic Studies, University of Kufa. (in Arabic)
6. Mayr, E. (2004). *What makes biology unique*. Cambridge University Press. (in English)
7. Milihi, M. M. (2004). *Introduction to Charles Darwin's The origin of species*. Supreme Council of Culture. (in Arabic)
8. Miliji, M. (2005). *Introduction to Charles Darwin's The descent of man and sexual selection* (Vol. 1). Supreme Council of Culture. (in Arabic)
9. Smith, C., & Sullivan, C. (2018). *The ten most common myths about evolution* (Trans. Samar Hamid). Sutoor Publishing. (in Arabic)
10. Thaxton, C., Bradley, W., & Olsen, R. (1984). *The mystery of life's origin*. (in English)
11. Wells, J., & Dembski, W. (n.d.). *The design inference: Eliminating chance via small probabilities*. Cambridge University Press. (in English)