



Critical Approach to Evolutionary Perspective of Richard Dawkins

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ABSTRACT

This paper presents an analytical descriptive study to review and criticize the evolutionary perspective of Richard Dawkins. Using his own interpretation of the theory of Darwinian evolution he denies religion, God and other metaphysical beliefs. Dawkins criticism is based on rational approach and it is believed that Dawkins theory suffers from rational methodological weaknesses and lacks adequate explanation needed to prove his claim. He also deals with major proof that acts as a basis for his theory and leads to a vicious circle to prove his theory. Dawkins theory lacks internal consistency because he presents many of its claims including complexity of God's existence without providing any logical proof and merely by considering it as incontrovertible which presents his system's weakness more than before.

Keywords: Dawkins, evolution, denial of God, natural selection, cumulative selection

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INTRODUCTION

After presenting the evolutionary theory of Charles Darwin in 1859 and its completion by the evolutionary biologists as his followers, some scholars like Richard Dawkins decided to reject theism by providing naturalistic and atheistic interpretations of the theory and dispute about fundamental beliefs, such as belief in God, relating the creation of the world and man to Him and... and related them to the blind and aimless natural selection.

Dawkins argues that religious belief, at least in the conventional sense, is a "delusion": it is a false belief held in the face of strong contradictory evidence (Dawkins, 2006: 5).

He stressed that his criticism of theism is associated with a supernatural creator worthy of worship (Dawkins 2006: 20). In his view this creationists' claim that "there is a superhuman and supernatural intelligence that has created the world and everything in it, including humans, intentionally" is invalid and in contrast he defends his hypothesis that "any creative intelligence, of sufficient complexity to design anything, comes into existence only as the end product of an extended process of gradual evolution. Creative intelligences, being evolved, necessarily arrive late in the universe, and therefore cannot be responsible for designing it. God, in the sense defined, is a delusion, a pernicious delusion" (Dawkins 2006: 31 and 55).

Dawkins, arguing that God is a complex affair and the realization of the complicated being is impossible, denies the existence of God. Additionally Dawkins believes that religion as a "meme" is transmitted from generation to generation such as other genetic features. In addition by criticizing arguments for God's

existence, he has rejected them all. The important point in criticism of Dawkins thoughts is that although it is possible to explain the complexities of the universe from the perspective of biology, this cannot lead to the denial of the designer and order in the universe.

History

It may be thought that Darwin's theory is the first theory that believes in the evolution of species but this is contrary to fact because this view of the different species existed before Darwin. Science and thoughts of human history suggests that the theory of evolution has a history in ancient Greek thought. Anaximander (610-547 BC), one of the first Greek philosophers, is considered as a pioneer of the theory of gradual evolution of living organisms (Khorasani: 1991: 14). He says at the beginning human being is born from other types of species (Copleston: 2007: vol. 1: 41).

After the period of ancient Greece in the eighteenth century, factors such as the discovery of fossils of animals and morphological studies caused a group of scientists about the theory of fixism to doubt. Comte de Buffon (1707-1788) is among these scholars. Buffon was the one who diagnosed fossils as the remains of extinct creatures. He even spoke of the possibility of the ancestor common to all mammals (Renan 2003: 570). After him Erasmus Darwin grandfather of Charles Darwin expressed this view more explicitly and finally Lamarck is the one who proposed a theory about evolution of biological species. Erasmus Darwin (1731-1802) is a scientist with different abilities in the field of physics, biology and engineering and has written books on botany like Zoonomia, The Temple of Nature and The Botanic Garden. His interest in research on different plans led him to the result that all kinds of life on the earth are related and come from the same origin and in this

regard he is considered to believe in the change of species (Ruse : 2008: 30; quoted in Alasti: 2009: 97)

According to many biologists Darwin's theory of evolution is the pivotal theory in modern biology. Theodosius Dobzhansky (1900-1975), an evolutionary biologist, believes that everything in biology makes sense only in the light of evolutionary theory (Sober: 1993: 5).

Richard Dawkins argues: "Darwinism is so vast that demands a lifetime of specialized work... Darwinism is the cornerstone of all studies known as human knowledge." (Dawkins 1986: Introduction) He also argues that Darwinism is the only theory that can disclose the secret of our existence (Ibid: 14).

Doctor Hossein Nasr about the dominance of this theory says: "Today everyone in the modern world thinks and speaks about everything with the criteria of evolution" (Nasr, 2003: 269-268). Freud also believes that the three scientific discoveries have caused three impacts on human religious thought of him: Copernicus's discovery about the fact that the earth is not the center of the universe, Darwin's discovery about the fact that humans are not apart from other animals and his discovery about human being affected by unknown aimless and sometimes uncontrollable forces (Parvin: 2005: vol. 1: 90). It seems that the best way to understand the foundations and pillars of Darwin's theory is to explain the intellectual roots of this theory. This means that Darwin's use of the inspiration and thoughts are expressed. In fact Darwin has taken parts of his theories from his predecessors based on the order he mentions and while integrating them, he has added new points to them. Among the most important theories that Darwin presented his theory are Malthus theory, the principle of survival, the principle of natural selection, the principle of compromise with the environment and the inheritance of acquired traits and the principle of direct communication or mutual solidarity.

The Ultimate Boeing 747 or the argument from improbability Dawkins using the interesting example presented by Fred Hoyle presents an argument about the inexistence of God and calls it Ultimate Boeing 747 or the argument from improbability of God's existence (Dawkins, 2006: 113)

He believes as the existence of the thing to be discussed is more improbable, its designer should be improbable as well. Dawkins considers God as a complex affair the existence of whom is improbable.

Dawkins' argument that there is no God is summarized as six points:

1. One of the greatest challenges to the human intellect, over the centuries, has been to explain how the complex, improbable appearance of design in the universe arises.
2. The natural temptation is to attribute the appearance of design to actual design itself. In the case of a man-made artifact such as a watch, the designer really was an intelligent engineer. It is tempting to apply the same logic to an eye or a wing, a spider or a person.
3. The temptation is a false one, because the designer hypothesis immediately raises the larger problem of who designed the designer. The whole problem we started out with was the problem of explaining statistical improbability. It is obviously no solution to postulate something even more improbable. We need a 'crane', not a 'skyhook', for only a crane can do the business of working up gradually and plausibly from simplicity to otherwise improbable complexity.
4. The most ingenious and powerful crane so far discovered is Darwinian evolution by natural selection. Darwin and his successors have shown how living creatures, with their spectacular statistical improbability and appearance of design, have evolved by slow, gradual degrees from simple

beginnings. We can now safely say that the illusion of design in living creatures is just that - an illusion.

5. We don't yet have an equivalent crane for physics. Some kind of multiverse theory could in principle do for physics the same explanatory work as Darwinism does for biology. This kind of explanation is superficially less satisfying than the biological version of Darwinism, because it makes heavier demands on luck. But the anthropic principle entitles us to postulate far more luck than our limited human intuition is comfortable with.
6. We should not give up hope of a better crane arising in physics, something as powerful as Darwinism is for biology. But even in the absence of a strongly satisfying crane to match the biological one, the relatively weak cranes we have at present are, when abetted by the anthropic principle, self-evidently better than the self-defeating skyhook hypothesis of an intelligent designer.

If the argument of this chapter is accepted, the factual premise of religion - the God Hypothesis - is untenable. God almost certainly does not exist. (Ibid, pp. 157-158)

He considers the only appropriate and accurate answer to the question of the existence of complex schemas in the universe creatures as Darwinian evolution by natural selection and believes that Darwin and his followers have shown how living creatures with all amazing statistical improbability and schemas are evolved over gradual degrees from simple beginnings of life.

Dawkins considers the complex affairs at the ones that seem to be designed for a specific purpose and humans are not inclined to postulate them because in his opinion the possibility of their realization is very low and on the other hand they cannot be regarded as a result of chance and accidents but their existence can only be viewed by step by step changes. He considers heterogeneous, being arranged and proficiency as the most important features of the complex affairs (Dawkins 1986: 3).

Dawkins in the analysis of complex affairs uses the approach known as "hierarchical reductionism" and describes it as: hierarchical reductionism describes any complex structure at any level of the hierarchy structure by the things that are located one level inferior. Of course the things that are one level lower are so complex that require to be described by smaller components and so on... Reductionism in this sense is another name for understanding the mechanism by a sincere enthusiasm (Dawkins 1986: 13).

Richard Dawkins considers three reasons as the causes of rejection of the theory of Darwinian evolution by people including: 1. Difficulty and complex nature of Darwin's theory, 2. human mind accustomed to small time scales 3. The human inherent ability in creative and amazing design (Dawkins 1986: 16-15).

He believes that there are two choices in the universe: 1. Single-step Selection, 2. Cumulative Selection. In his view the cumulative selection itself is divided into two parts of natural and artificial selection. Natural selection exists in all living organisms and artificial selection is in human-made computer programs.

According to Richard Dawkins the cumulative effect has three components so that if any of them does not function properly, the desired result is not obtained. These components include: 1. the talent or property of self-replication, 2. Mistakes in self-replication and 3. Power (Dawkins 1986: 130-128).

According to Dawkins's view contrary to the common belief that natural selection is a devastating process, natural selection is a constructive process. According to him, natural selection can be constructive in two ways. One method is related to the

partnership relationship between genes within a species which is known as "Coadapted Genotypes". Also since the genes are selected in in the environment that the genes of other species are created, the "arm races" appear and create another great power that leads the evolution in a world the result of which is seen as a complex and developing plan (ibid: 169).

Criticisms against Dawkins

Despite Richard Dawkins' skill in writing mesmerizing and compelling essays, his speeches and articles have a lot of fallacies and ambiguities including the creation of generalizations and ambiguity, taking some claimed principles as granted, the lack of stability of some preliminary discussions and... Some of the criticisms of Dawkins will be discussed below.

Naturalism

Based on the naturalistic viewpoint, the world's reality is nothing but the sensible nature and the physical forces in it and to explain the events of nature it is necessary to seek help from natural laws to explain these things and it is not possible to involve something outside the seemingly self-sufficient world. Richard Dawkins in all written texts and discussions on the beginning and end of the world and this existence has assumed naturalism and by relying on it as if he has proved the uniqueness of the world in the material world by philosophical certain arguments, rejects the involvement of supernatural agent or agents in evolution. Dawkins' this point of view leads to two fatal errors: The first error is that not only Dawkins does not prove the trueness of belief in naturalism and negation of supernatural purposefully or inadvertently and considers the audience responsible for that but also refuses the methodical criticism and systematic of the views of those who believe in the supernatural affairs.

Dawkins second error results from confusion between two conceptions of naturalism. Naturalism has two meanings: 1. Methodological naturalism, 2. ontological or metaphysical naturalism. In methodological naturalism that indicates the framework and the scope of the scientists, the scientists in scientific work does not seek to find the influence or agency of any unnatural force and does not include the hypotheses that are based on such forces or unnatural maxims which is the inherent part of the scientific work and orients the scientists' work and of course it is retractable with theism and supernatural forces. But the ontological naturalism means that the "only" correct interpretation for each aspect of reality is physical explanation. The monopoly of ontological explanation phenomena to physical interpretation expresses the belief that first there is no force or another factor beyond the material world and second any phenomenon should be interpreted based on the concepts and material, physical, chemical and so-called natural relations. It is clear that in such an interpretation there is no place for belief in spiritual beings such as God because reality is only associated with the physical and material reality.

Dawkins and his other colleagues' error is that they have failed to distinguish between the two concepts of naturalism or with a fallacy they have concluded the ontological naturalism from methodological naturalism (Ruse2008: 12-11; Mohammadrezaei & Shahbazi: 2011: 53).

Hierarchical reductionism

In one sense reductionism means ontological reductionism and in other sense it means the reduction of all combined components of a complex affair. Dawkins in the analysis of complex affairs uses "hierarchical reductionism"(Dawkins 1986: 13).

For example Dawkins in "the blind watchmaker" used hierarchical reductionism to explain his intended affairs and without discussing a convincing reasoning and argument in his ontological studies, limits the world's reality in "matter" and in anthropological studies limits the human being in "genes". In other words Dawkins at this stage of his activity uses fallacy of reductive or "fallacy of nothing-but".

The problem with this fallacy is that the words including the terms "nothing-but" imply the Acknowledgment of "something more" because unless I am more than my body, how do I know or admit that I am nothing but my body (Geisler N and Brook R: 1990: 107). Under the same reduction error, it is possible to cite the confusion of all and some / whole and part. Dawkins' "the blind watchmaker" presents examples that have this error and in explaining the process of a phenomenon he overwhelms the audience in the details of the phenomenon that he ignores first the holismic look (the connection of the systems with the components of a complex combination) and second from the arrival of each component to their goal and stopping the process of evolution and development and the question of 'why'.

Negation of the end in nature

Proponents of the Darwinian theory of evolution and especially Richard Dawkins due to establishing their thought based on naturalism consider the interpretation of the "how" of things versus the interpretation of the "why" of things and since they are successful in explaining the "how" of things they negate "why" and the end without providing any reasoning. For example, Dawkins considers the evolution and natural selection process as a blind and endless process (See: Dawkins: 2006).

The question that arises here and Dawkins and his colleagues do not respond to it or refer the audience to vague concepts such as "consistency" and "adaptability" to answer is that why the evolution of an organ such as eye or nose of human system which is one of the existing systems stops when he is at such level of evolution? Is it because the heart or eye is completed and attained the purpose it has? The naturalistic theory could never answer it from its naturalistic point of view (Mohammadrezaei & Shahbazi: 2011: 55).

Dawkins's inability to explain the process of evolution and the cumulative selection

Dawkins in describing cumulative selection by mentioning the example of monkeys and typewriters believes that the most important factor to understand the cumulative selection is to consider enough time. In this regard, he says: "I don't know who it was first pointed out that, given enough time, a monkey bashing away at random on a typewriter could produce all the works of Shakespear." (Dawkins 1986: 48-46). Dawkins says Let us limit the task facing our monkey somewhat. Suppose that he has to produce, not the complete works of Shakespeare but just the short sentence 'Methinks it is like a weasel'. After various writings and over 43 generations of writings he will be able to reach the intended sentence. In the 43rd generation we will have the intended sentence (Ibid).

The question that Dawkins should answer here is that first how the monkey understands that this sentence is similar to the original sentence and stops working (generation 43) at this stage? Secondly, there must be an original sentence so that the monkey could make a comparison. Thirdly where did the original sentence come from? Or in other words who has "created" or according to Dawkins "produced" it? Given that Dawkins has no answer for the above questions we have to negate Dawkins' assumption of the power of cumulative

selection and accept that there is a designer for the original sentence.

The incidence of cycle in the blind watchmaker and the necessity to take its principles for granted

Given that Richard Dawkins cannot explain some of his principles such as the cumulative selection and makes cycles in explaining them, in order to be free from this cycle he suggests that we have to take the process of replication and cumulative selection for granted. Thus Dawkins in his Darwinian explanation of the complex process of formation of the universe refers them to cumulative selection _which is a complex process itself_ that has no explanation power and the only way is to consider it for granted.

From Dawkins point of view "the theory of the blind watchmaker is extremely powerful given that we are allowed to assume replication and hence cumulative selection. But if replication needs complex machinery, since the only way we know for complex machinery ultimately to come into existence is cumulative selection, we have a problem (Dawkins 1986: 140).

Dawkins is describing his opponent's perspective says: All who have given thought to the matter agree that an apparatus as complex as the human eye could not possibly come into existence through single-step selection. Unfortunately, the same seems to be true of at least parts of the apparatus of cellular machinery whereby DNA replicates itself, and this applies not just to the cells of advanced creatures like ourselves and amoebas, but also to relatively more primitive creatures like bacteria and blue-green algae.

So, cumulative selection can manufacture complexity while single-step selection cannot. But cumulative selection cannot work unless there is some minimal machinery of replication and replicator power, and the only machinery of replication that we know seems too complicated to have come into existence by means of anything less than many generations of cumulative selection! Some people see this as a fundamental flaw in the whole theory of the blind watchmaker. They see it as the ultimate proof that there must originally have been a designer, not a blind watchmaker but a far-sighted supernatural watchmaker (Dawkins 1986: 140-141).

This is the most important fallacy of the theory of the blind watchmaker; so it is necessary to accept the existence of the supernatural prospector designer rather than a blind watchmaker.

Inability to justify the beginning of life on the Earth

Including criticism against Richard Dawkins is the inability of the theory of the blind watchmaker and natural selection to justify the beginning of life on the Earth. Dawkins and his other colleagues have failed to describe the activities and natural selection's start of working, so it is not possible to accept natural selection as an unmitigated postulation.

Inability to explain organized complexities

Dawkins theory fails to justify the organized complexities such as DNA RNA proteins complexity. Dawkins in response to the mentioned fallacy without providing any specific arguments believes that the opposition argument is not a feeble argument. He also has to justify his views and answer critics called to take

the complexity of DNA and RNA proteins for granted¹ (Dawkins 2006: 141).

The lack of accurate conception² of God

He believes as the existence of the thing to be discussed is more improbable, its designer should be improbable as well. Dawkins considers God as a complex affair the existence of whom is improbable. Due to being caught in ontological naturalism he has failed to have an accurate idea of God and the supernatural world and insists on God's complexity if He exists. In criticizing this view it should be noted that the complexity of any creature equals with its having component and being composite which is not true about God because God is not composite, but simple (Tabatabaei: 2006: 93).

Conclusion

As we saw Dawkins by taking Darwin's theory of natural selection reaches the concept of cumulative selection which is subject to self- replication feature. He has used this theory to deny the existence of God and believes that the existence complex schemas in the world have created this temptation in human being to consider the worlds as the product of a designer. The principles of Dawkins theory based on hierarchical reductionism naturalism, negation of the end in nature, evolution and natural and cumulative selections, the theory of the blind watchmaker and organized complexity are discussed and they are all criticized. The common point of our criticism of Dawkins is that he does not provide strong evidence to prove his claims and takes cumulative selection principle for granted which requires a separate proof. He considers the God's existence as a complex affair and does not provide a reason for that. Dawkins considers the evolution and natural selection process as a blind process and fails to explain why some of the vital organs of the human body stop to evolve after reaching their end. And does not provide an answer to why the complexity in DNA should be taken for granted.

The methodological weaknesses can clearly be seen in proving his claims. Finally it is possible to oppose the theory of Dawkins to reject the existence of God with open and critical rationality.

References

Books

- Peterson M., et al., 2008, Reason and religious belief, translated by Naraghi, A., & Soltani, S., Fifth Edition. Tehran: Nashre no publication, page 539.
- Parvin, LE., 2005, Psychology of the personality translated by Javadi, M., Kadivar, P., first volume. Tehran: Institute of Cultural Services of Rasa, 350 pages.
- Khorasani, Sh., 1991, First Greek Philosophers, Tehran: Islamic Revolution Education, page 538.
- Darwin, Ch., 1982, The Origin of Species, Translated by Farhikhte, N., page721
- Dawkins, R., The blind watchmaker, Translated by Behzad, M., and Bagheri, Sh, The second edition. Tehran: Maziar, page 383.
- Renan, C., 2003, History of Cambridge Science, Translated by Afshar, H., Third Edition. Tehran: Publication Centre, 752 pages.

¹ This is a transparently feeble argument, indeed it is obviously selfdefeating. Organized complexity is the thing that we are having difficulty in explaining. Once we are allowed simply to postulate organized complexity, if only the organized complexity of the DNA/ protein replicating engine, it is relatively easy to invoke it as a generator of yet more organized

complexity. That, indeed, is what most of this book is about. But of course any God capable of intelligently designing something as complex as the DNA/protein replicating machine must have been at least as complex and organized as that machine itself.

² notional / conception / mental picture

- Rue, V., The philosophy of religion, Translated by Elmi, Gh., Tabriz: Aeen Publication, Page 264
- Shakerin, H., 2006, Proofs for the existence of God in a criticism of John Hospers, First Edition. Tehran: Cultural Institute of science and contemporary thought, page 333.
- Tabatabaei, M. 2006. The ultimate wisdom, Qom: Publication of Imam Khomeini (RA), page 344.
- Copleston. F., 2007, History of Philosophy (Greek and Roman). Translated by Jalal al-Din Mojtavavi. First volume, Tehran: Soroush Publications, 602 pages.
- Nasr, H., 2003, Young Muslim and modern world, Translated by Asadi, M., Tehran: Tarhe No, page 372
- Darwin's Ch. 1999. on The Origin of Species: Bantam Classcis. Reissue Edition. 512 pp.
- Dawkins R. 1986. The Blind Watchmaker. Harlow: Longman.345 pp.
- _____. 2006.The God Delusion Boston: Houghton Mifflin. 398 pp.
- _____. 1976. The Selfish Gene. Oxford: Oxford University Press. 236 pp.
- Geisler N and Brook R. 2006. Come, let us Reason an Introduction to logical Thinking; Baker Book House Company. 232 pp.
- Ruse M. 2008. The Evolution Wars: A Guide to the Debates. Grey House publishing. 326pp.
- Sober E. 1993. Philosophy of Biology. Oxford University Press. 256 pp.
- publisher: Weidenfeld & Nicolson publisher: Boston: Houghton Mifflin. 272 pp.

Articles

- Alasti, K., 2009, Darwinian theory of evolution and historical explanation in biology, Journal of Philosophical Research. 16: 113-93.
- Mohammadrezaei, M., Shahbaz, A., 2011, Neo-Darwinism: Principles and problems. Qabasat Journal. 16: 66-51.
- Dawkins, R. 2003. The Improbability of God. Free Inquiry. Volume 18. 3
- _____. Good And Bad Reasons For Believing.