

Creationist Discourse in Education (On the Examples of U.S. and the Republic of Georgia)

Givi Amaglobeli

PhD Candidate, Iv. Javakishvili, Tbilisi State University, Invited Lecturer, International Black Sea University, Tbilisi, the Republic of Georgia

Abstract: *Based on the comparative analysis of American and Georgian cases, the given article examines contradictory interrelation between a scientific principle of education (theory of evolution) and a pseudo-scientific teaching (Creationism). It has become an important subject in recent years (of course, not only in U.S. and the Republic of Georgia, but globally, one may argue), as certain religious groups are trying to reconsider/deconstruct/cancel the scientific method of teaching in schooling systems of many developed/developing countries and replace it with pseudo-scientific (or, anti-scientific) teaching. The issue will be examined within the discourse analysis framework as a conflict between two discourses, in the context of the power struggle. Within the scope of this article we will try to review and compare both variations of the case, examine its reasons of occurrence and perspectives of future developments.*

Keywords: Education, Theory of Evolution, Creationism, Scientific method, teaching

1. Introduction

The debate between evolutionism and creationism is a conflict between modern science and the so-called "religious science", which represents an inconsistent and contradictory teaching. We view this contradiction within the framework of Discourse Analysis, where one of the theories (Theory of Evolution) appears as a dominant discourse in the area of education and the second one (Creationism) as secondary, or subordinated one. What is the case here, is that the secondary discourse (Creationism) tries to challenge and eventually deconstruct the dominant one (which will eventually result in replacing the Theory of Evolution in the curriculums of educational institutions of the countries with Creationism). In its strategies, pseudo-scientific teaching of Creationism uses specific discursive strategies which implies the utilization-usage of the scientific concepts/findings and terminology in such a way, that they justify its central argument (Creation). So that, creationists agree with the basic objective facts of the scientific method, however use them in order to assert their central claim.

As we view the conflict between the scientific method and fictional science in terms of conflict between two different discourses, we must also mention that it has taken an institutional form, meaning that the area of education has become a battlefield for struggle between these two.

The confrontation between creationism and evolutionism occurred in 19th century US in the context of biology teaching. In the following period, when cosmology emerged as a verified field of observation (20th century), the battlefield expanded and covered the mentioned aspect of the problem.

1.1 Evolutionism vs. Creationism: Georgian and American Approaches

Creationism is the approach according to which the universe originated in six days and its age does not exceed several thousand years (6 thousand years, according to the main

version). As it is now proven, astrophysical science has estimated that the universe and earth are respectively 13.7 billion and 4.5 billion years old.

The most conservative form of "Creationism", disagrees with astrophysics in defining the age of the universe and rejects the scientific approach of the evolution of the universe. However, for example, it should be mentioned that the heads of local (Orthodox) churches have quite loyal opinions and note that the science and religion don't contradict each other, rather they have their own "areas" of activity.

Although astrophysics is based on credible assumptions, creationists try to counter modern science. Some critics of Creationism note, that the only job of creationists is to look for approaches and theories that go against classical science, even if these approaches and theories are not compatible with creationism (3). For example, a pamphlet entitled "Big Bang: Myth or Reality" by Merab Jibladze is widely popular among Georgian creationists, despite the fact that Mr. Jibladze supports the idea that the universe has always existed (it has never been created). The creationists mentioned "attack the core of knowledge that we have gathered about the universe, evolution, our origin and our place in it (universe)" (8)

The reality at this time is the following: modern cosmology proves that the universe has a beginning in time, which is fully in line with the Christian cosmogony, whose central message is the assumption that God gave the universe a beginning (8).

In the Journal "Statements of the Patriarchate" we find an article entitled "Morality or an Unbridled Egoism? Evolutionism and Atheism are fighting against human's immortal soul", whose author is Giorgi Bagaturia, Deputy Head of the "Creationist Society" of the Georgian patriarchate, Professor at Georgian Technical University. According to the author, theory of Evolutionism and its firstling - atheism are dangerous for the immortal human

soul. Moreover, The Theory of Evolutionism created Social Darwinism, which later became the basis of a misanthropic doctrine—theory of natural selection. This has established the principles of egoism which resulted in the following: Racism, Nazism, Communism and “Jungle Capitalism”. As the author states, “to the demand to teach both evolutionist and creationism approaches at schools, chiefs of the Ministry of Education reply that they already have scientific subjects in the curriculum and don’t even realize that the very Evolutionism is a non-scientific theory”(10)

Here we come across with an interesting case, when adepts of creationism blame the natural science and the scientist of being immoral and egoistic, while their side stands for high morals and integrity. From this perspective, all social-political evil acts that were conducted during the modern history has to be indicted on science, logically. Moreover, as it is well known, promulgators of Creationism/Intelligent Design constantly portray science and scientists as being immoral and inhumane while communicating their ideas to younger generation, thus creating a negative image of science in children, respectively.

Richard Douglas Harris was a bishop of Oxford in the Anglican Church from 1987 to 2006, and from 1993 he was a member of the House of Lords. Since 2008, he has been Professor of Theology at Gresham College. Within the framework of Europe Week in Tbilisi, Lord Harris visited Georgia. He participated in a public discussion at the European House on "Secularism - The Role of Religion in a Secular State." He also met with the Council of Religions at the Public Defender's Office. The article provides a fragment of the interview with Richard Harris which was conducted by the Journalist EkaSichinava, the article was published in *Tolerance Centre under the Auspices of the Public Defender*.

To the Journalist’s question: “Atheist Richard Dawkins and you opposed the teaching of creationism in public schools. In general, how do you think religion should be taught in school?” (9) Dr. Harris replied, “there was one evangelical school where creationism was taught in a biology lesson. Dawkins and I argued that this is wrong because creationism is not a scientific theory. As for religious schools, these are the same state subsidized schools where religion occupies a large part of the curriculum. I am in favor of teaching the history of religion. However, the lesson should not become a place of preaching. People need religious education. The history of religion can be interesting for both believers and atheists”(9)

While discussing this issue, we can consider the American approach, who acknowledge that it is impossible to remove religion from the education sphere where you have religious employees in schools or universities, including fanatics. Creationism is one of the major rivals of the science, and this rivalry reveals itself in various aspects: some creationists are convinced that the earth occurred as it is about 6,000 years ago; others suggest that God created the earth much earlier and that the creation of living things is still going on; some believe that it is God who initiated all the creation. According to them, God created the mechanism

of creation of the universe (including evolution) and no longer interferes with natural processes.

As to the history of rivalry between evolution and creationism in US, we bring a well-known case of a Tennessee schoolteacher named John Scopes was convicted of violating local law in teaching evolution in 1925. The whole country was watching the "monkey process". Scopes was defended by well-known lawyer Clarence Darrow and supported by the top US presidential candidate, William Jennings Bryan. The debate between the two was on broadcasted on the radio.

Scopes pleaded guilty (he, at least, violated the law), was fined \$100. The state Supreme Court went into some technical detail and changed the verdict, but upheld the anti-evolutionist law. After that events, the teaching of evolution was banned in other states as well. Although, over time, evolution returned to the textbooks. U.S. President Dwight Eisenhower and Congress played a major role in this. In 1957 the Soviet Union launched the first artificial satellite to space, after which the U.S. government started to pay more attention to the teaching of natural sciences in schools. In 1958 the new law on education for national defense was passed, under which the federal budget funded new textbooks, including the theory of evolution.

The question of whether the teaching of evolution was compatible with the constitution remained open. It was only in 1968 that the US Supreme Court ruled that it contravened the First Amendment's prohibition on state religion. In 1987, the same instance was deemed unconstitutional on the basis of the Louisiana Creationism law, according to which evolution could only be taught if creationism was studied in parallel.

In the U.S., creationism has been transformed into a fashionable concept of "intelligent design", which basically states that evolution does exist, but the creator gives the direction to it. For example, in 2005, the administration of the Dover County Department of Education in Dover, Pennsylvania, replaced biology class with the "intelligent design" class. Parents protested against and sued the official and in addition, the court ruled that "intelligent design" was a religious theory, not a cognitive one and the decision made was against the constitution(3).

As to the Georgian version of the case, there is no counterpart of the "intelligent design" concept at the current stage, at least. In any case, it is a new trend in Georgia - a contradiction between religious and scientific discourses, where as mentioned above, the minor one (Creationism) tries to challenge and deconstruct the dominant one (Theory of Evolution).

In this context, it is interesting to review the considerations of some of the Georgian religious figures who are advocates of creationism as they try to push their agenda into the secondary schools in Georgia.

Archpriest of Georgian Orthodox Church, Levan Mateshvili, who holds a PhD degree from Tbilisi State University, has quite extraordinary ideas about paleontology, in general.

According to him, dinosaurs are not prehistoric creatures who went extinct, but they „co-existed“ with humans. In order to support his claims, the Georgian theologian refers to the most odious „facts“ of a pseudoscience – creationism proposing that dinosaurs are nothing else but dragons and other mythological creatures. He then goes on elaborating his discourse, adding that (Georgian) Christian saints played a special role in extermination of dinosaurs, which is a whole new approach in paleontology, as well as in theology, we may consider (7).

It should be mentioned, that there are striking similarities between the discourses of American and Georgian Creationists. Quite large segment of American Creationists claim that dinosaurs have co-existed with humans less than 10 000 years ago. They even have a Creation Museum in Petersburg, Kentucky, where maquettes of dinosaurs are displayed together with human models. American Creationists (for example, Ken Ham, founder of the Creationists Museum) also do believe that “ancient stories of monsters and dragons may have been accounts of human encounters with dinosaurs” (6).

It is important to note that nowadays there is no national curriculum guidelines or requirements in any field of science in the United States, however, state governments do exercise such practice. These standards help to ensure local school boards within each state with an accepted guideline about the classroom instruction in sciences and other courses. Despite the fact that these standards are different in terms of quality and detail in each state, all the standards in all states recognize the importance of evolutionary theory to at least some degree (5). There is a strong monitoring of school boards by the National Center for Science Education, as well as State Academies of Science, and by other local scientific and professional organizations.

1.2 The Approach of Teaching Creationism at Schools

As we know the term creationism describes supernatural explanations for the origin of life, and the diversity of species on earth. According to many scientists the science classroom is not a proper place for discussing the creationism. We provide an interesting observation by the Canadian professor of Psychology Lynne Honey from the MacEwan University, Edmonton, who discusses his experience in the article entitled “Why I teach the controversy: using creationism to teach critical thinking”. As the author notes, when he started teaching he was not used to teach creationism and was focused only of his area of expertise (Psychology). Over time it became clear that students expressed interest about creationism. Students could not understand the difference between a scientific approach to knowledge and non-scientific approaches. This made Prof. Honey wonder, whether ignoring supernatural views allowed them to remain as viable “alternatives” to scientific hypotheses, in the minds of students (4).

We should pay attention to the slogan “Teach the Controversy” which was originated in the 21st century, according to which educators should present arguments both for and against evolutionary theory. Due to the fact that, “there is a Supreme Court mandate to teach scientific

critiques of prevailing theories and that federal policy dictates that curriculum should help students understand controversies, that teachers should be expected to teach evolution as if there is an actual scientific controversy about evolutionary theory” (4). We know that many scientists and among them Richard Dawkins had very strong reaction about this issue and stated that there was no place for creationism in a science classroom (2).

Author provides information about two key principles about the rejection of the Teach Controversy movement. First is that there is no controversy at all. Darwin’s evolutionary theory is a well-supported and has undergone strong testing. As for the second one, creationism does not belong in science curricula. Entertaining non-science notions is dangerous because discussing those notions in a science classroom risks legitimizing them. The author agrees with the first principle; however, he has a different view about the second principle and thinks that there is a value in discussing creationism in the science classroom.

Until 2005, Prof. Honey was used to teach evolution as if creationism did not exist. It was not part of his teaching materials and in case if students had questions about creationism the lecturer had to reply that those questions were not suitable for a science classroom, thus the lecturer was discussing those questions outside the lecturing process and was used to note that what he was explaining were just his thoughts and were out of the course material, “in 2005, I noticed an increase in the number of questions that students raised about creationism, likely in response to the media attention that surrounded the trial in Dover, Pennsylvania where a parent took the Dover Board of Education to court over the Board’s decision to use a creationist textbook in science classes” (4).

It should be mentioned that creationist views are quite widespread in the U.S. According to the statistics provided by the Pew Research Center, 2019 eight-in-ten U.S. adults (81%) believe that humans have evolved over time. This includes one-third of all Americans (33%) who say that humans evolved due to processes like natural selection with no involvement by God or a higher power, along with 48% who think that human evolution occurred through processes guided by God or a higher power. The same survey found that 18% of Americans reject evolution entirely, saying humans have always existed in their present form (11).

The author thinks that creationism is a sociopolitical controversy and not a scientific one, he doesn’t question the validity of evolution as an explanatory model and presents creationism as a political or “denialist” (4) movement, rather than a competing theory with its own strengths and evidence. “I encourage students to ask questions and force me to defend my statements. I then ask them to attempt to generate hypotheses and tests of creationism. Their struggles with this task lead them, logically, to the conclusion that many creationist assertions are unfalsifiable and therefore non-scientific” (4) notes Prof. Honey.

Finally, the author states that, non-science and anti-science approaches should have and do have a place in the science

classroom, as they can be used to train students in the logic associated with scientific thought.

2. Conclusion

Although Georgia is a secular country, the Georgian Orthodox Church has a great authority and uses its influence in various social institutions, including educational space. Although there exist some creationist movements in Georgian religious segments, including Georgian Orthodox Church as a centralized religious institution, their influence is limited particularly with academic staff who have strong religious identities. It does not spread on an institutional level within the sphere of education. On the other hand, the power struggle between scientific and religious discourses in educational sphere is not limited with secondary schools only and has entered the higher educational institutions, as well.

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