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Kultura i Edukacja nr 5, 91-101

2008

Artykuł został opracowany do udostępnienia w internecie przez Muzeum Historii Polski w ramach prac podejmowanych na rzecz zapewnienia otwartego, powszechnego i trwałego dostępu do polskiego dorobku naukowego i kulturalnego. Artykuł jest umieszczony w kolekcji cyfrowej bazhum.muzhp.pl, gromadzącej zawartość polskich czasopism humanistycznych i społecznych.

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COMMUNICATES—REPORTS



Stanisław Burdziej

DISPUTE ON EVOLUTION IN THE AMERICAN SCHOOL: ON THE SOCIAL CAUSES OF ANTIEVOLUTIONISM IN THE USA

The turn of the twentieth and the twenty first century still seems to be a period of intensive expansion of scientific knowledge¹. The world leader of technical progress is the United States for several years leading in the rating of the most prestigious universities of the world or in the granted Noble prizes. At the same time when American scientists discover next mysteries of nature, nearly half of their compatriots do not accept the fundamental theory of contemporary nature sciences – the theory of evolution. For decades in the USA there has been a dispute on its teaching at public schools. However, when in October 2006 Mirośław Orzechowski, the vice minister of education in the government of Jarosław Kaczyński, described the theory of evolution as “a lie” and a “loose concept of a disbelieving older man”², the concept of teaching the evolution was introduced to Polish ground. In spite of the agitation which resulted from the speech of the vice minister, the temperature of of the dispute cannot be compared to the one in the USA, the temperature which is stimulated by the problem of teaching about the beginning of the Universe.

The aim of the article is not justifying one of the viewpoints in the dispute on the evolution, but, firstly, a short presentation of the concept on teaching the theory of evolution and creationism in American schools, and secondly, a trial to

¹ The article was created owing to the support of the Foundation in favour of Polish Science, and also owing to the grant of John F. Kennedy Institute by Freie Universität Berlin. The author is deeply grateful to both of the institutions.

² The quote for: M. Ryszkiewicz, *Skandalista Darwin*, “Newsweek” 2006, No. 43, p. 74.

explain the sources of the aversion towards the theory of evolution in wide circles of American society. As opposed to the majority of Polish researches” works on the given problems I have decided to accept a sociological perspective not a philosophical one. What is important to me is the social context of the dispute, especially the complex relations of cultural domination in the USA, not the *substance* of the controversy.

1. The varieties of creationism

Substantial percentage of Americans consider the theory of evolution as highly controversial hypothesis, not as an objective scientific rule, one which is confirmed in empirical facts. The opponents of the theory of evolution differ among one another as for the acceptance of the achievements of contemporary science and the level of getting used to the literary interpretation of the creation description³. The two main attitudes are the young and old earth creationism. According to the first one, so-called creationism of the ”young earth”, our planet was created between 6 and 10 thousand years ago, whereas all the species were created during the first six days of the world existence. The fossils found by palaeontologists are, in the opinion of the thesis supporters, thesis known also as ”strict creationism”, the remains, after the described in the Bible the great Flood, and dinosaurs and people lived at the same time. The classical interpretation of this point of view is included in the book of Henry Morris and John Whitcomb entitled *The Genesis Flood* dated 1961 which is the basis of the so-called creation science⁴ up till now.

The second attitude – the creationism of ”the old earth” in several ways tries to reconcile the theory of evolutionism with the picture of God-Creator. According to the *day-age theory* a day in the Bible description of the creation does not correspond with the earth day and night, but it does with the whole epoch, one which lasted even hundred millions of years. Within the attitude there are numerous varieties. The *gap theory*, for example, starts with two separate creation descriptions as one can find in the Book of Genus (Gen. 1,1 and 1,2): the first creation that took place millions of years ago has been destructed, whereas God has rebuilt everything in six days. The fossils are the proofs of ”the first creation”. The most wide-

³ A detailed classification of the whole spectrum of the varieties of creationism and evolutionism is presented by K. Jodkowski in the work entitled *Metodologiczne aspekty kontrowersji ewolucjonizmu-kreacjonizmu*, Lublin 1988.

⁴ H. Morris, J.C. Whitcomb, *The Genesis Flood*, Philadelphia 1961.

spread attitude is the progressive creationism, one according to which the creation process was stretched in time, and God was creating single plants and animals which subsequently were evaluating.

The majority of religions and churches believe, obviously, in some form of world creation. The official attitude of the Catholic Church and main Protestant churches may be depicted as the *theistic evolution*. It is based on the fact that God created the rules of nature which without His direct influence directed the process of evolution. Because of the fact that the supporters of the given attitude accept the achievements of the contemporary theory of evolution, not noticing the opposition between science and beliefs in the God-Creator, they are not, however, thought to be creationists⁵.

The latest creational “theory” is “the intelligent design theory” called in short – ID, created at the end of the 80s of the XX century. The attitude depicts change of the creationists strategy being under the influence of the next failures in the court: they do not form their postulates in the religious language, they do talk only about “the scientific objection” as for the theory of evolution. They tried to avoid the charge of violation of the non-establishment principle of the church from the country, a charge that was the basis of rejecting the demands of creationists by American courts. The strategy does not change the fact that the ID movement is a masked form of creationism in spite of the fact that the representatives concentrate on gap-showing in the theory of evolution, for example the discontinuity of found in the mines remains or so-called “non-reduced complexity” of some organs. One of the key arguments of the supporters of the attitude is the fact of the great complexity of a human eye: they recall the observation of the XVIII-century British philosopher, William Paley, that, similarly, when we find a complicated clock mechanism at the wilderness then we may deduct that there must have been some watchmaker, in the same way the complexity of an eye – and other “mechanisms” of the nature – make us think about the existence of some genius Universe Designer⁶. In order to support its postulates the ID supporters create persons lists,

⁵ The detailed philosophical considerations concerning the notion of “creation” and its non-contradiction with the theory of evolution was depicted by the priest Kazimierz Kloskowski in the book under the title *Between the evolution and creation*. Warsaw 1994. The evolutionary model of creationism is being developed by Józef Marcei Dołęga in the work entitled *The creationism and evolutionism. Evolutionary model of creationism and the problem of hominization*, Warsaw 1988.

⁶ See E.C. Scott, *Antievolution and Creationism In the United States*, “Annual Review of Anthropology” 1997, vol. 26, p.280; J.A. Moore, *From Genesis to Genetics: The Case of Evolutionism and Creationism*, Berkley–Los Angeles–London 2003, pp. 176–180.

persons with the doctor's title who reject the theory of evolution⁷. The Institute for Creation Research (ICR), Discovery Institute and Answers in Genesis take care of the promotion of the attitude; they issue numerous publications, among others the materials for teachers and parents, DVD courses of self-education, and the Californian ICR provide the stationary and correspondence master's studies in the scope of physical sciences, where one of the basic subjects is "the advanced creationism"⁸. The scale of the lobbyist efforts of the ID movement representatives may be depicted by the fact that in May 2000 they managed to organize a briefing for the members of the US Congress under the title: "Scientific proofs of the intelligent design theory and their implications for politics and education"⁹. The speech of George W. Bush dated 2005 also resulted in an agitation, a speech where he expressed his support for parallel teaching of the theory of evolution in school and the intelligent design¹⁰.

2. The American public opinion on the evolution subject

Public opinion surveys for a few last decades have proved that a stable majority of Americans support some form of creationism. Nearly half of the respondents believes in the strict creationism version, which means they choose the statement: "God created a man mostly in the contemporary shape, with one act in the last 10 thousand years". Between 35 and 40% of American accepts the beliefs in God, and at the same time the theory of evolution, and only 9–13% claim that the process of evolution has nothing to do with God (the thinking is not, obviously, identified with the declaration of disbelief in God; in the USA only about 1% of population consider themselves as atheists)¹¹. Table 1 presents the results of the public opinion survey on the theory of evolution carried out by the Gallup's Institute within the last twenty three years.

⁷ The example here can be the certificates anthology of 50 persons with doctoral thesis, who explain their creationism in the book published by J. Ashton, *In Six Days: Why Fifty Scientists Choose to Believe in Creation* (Green Forest, 2002).

⁸ E.C. Scott, G. Branch, *Antievolutionism: Changes and Continuities*, "Bioscience" 2003, v. 53, No. 3, pp. 282–285.

⁹ R.T. Pennock, *Creationism and Intelligent Design*, "Annual Review of Genomics and Human Genetics" 2003, v. 4, p. 150.

¹⁰ P. Baker, P. Slevin, *Bush Remarks On "Intelligent Design" Theory Fuel Debate*, "The Washington Post", 3rd August 2005, p. A01.

¹¹ P. Edgell, J. Gerteis, D. Hartman, *Atheists as "Other": Moral Boundaries and Cultural Membership in American Society*, "American Sociological Review" 2006/71, pp. 211–234.

Table 1. Americans' opinions on the beginning and development of human life

	Evolution without God taking part in	Evolution – God taking part in	Creation in the present shape	I don't know
2006	13	36	46	5
2004	13	38	45	4
2001	12	37	45	5
1999	9	40	47	4
1997	10	39	44	7
1993	11	35	47	7
1982	9	38	44	9

The source: Gallup Poll, a survey carried out 8–11 of May 2006, 7–10 of November 2004, 19–21 of February 2001, 24–26 of August 1999, 6–9 of November 1997, 18–2 of June 1993 and 23–26 of July 1982.

Among the supporters of the theory of evolution there are more people who are better educated: graduates of colleges two times more often believe in Darwin's concept of evolution through natural selection than people who finished their education on a lower level. A factor which differentiates strongly is also religion: white evangelical Christians are far more prone to accept the creationism than white Catholics or the representatives of the main Protestant fields (so-called mainline Protestants). The line of division is presented also by the political sympathies: about 60% of conservative republicans believe that the world was created in the present form, an attitude that is supported by only 29% of liberal democrats. At last, women and older people more often accept creationism than men and younger people. What is interesting, however, about 46–51% of Americans accept, in some way, the theory of evolution (see, table1) but nearly two thirds of the respondents support parallel teaching of creationism and the theory of evolution in public schools (table 2), not being aware of the fundamental contradiction between the theory of evolution and strict creationism.

Table 2. The support for the theory of evolution and creationism teaching at schools (in %)

	I support	I reject	I don't know
Teaching creationism together with the theory of evolution	64	29	10
Teaching creationism instead of the theory of evolution	38	49	13

The source: *Public divided on Origins of Life. Religion a Strength and Weakness for Both Parties*, the report of The Pew Forum on Religion & Public Life, Washington, D.C. 2005, available on the page: <http://pewforum.org/publications/surveys/religion-politics-05.pdf>.

3. The history of legal controversy around teaching the theory of evolution

The history of legal controversies around the evolution derives from the famous trial of *scopes* dated 1925, called also “the monkey trial”¹². In spite of the fact that the fundamentalists led by William Jennings Bryan won formally the process (the state regulations banning teaching the theory of evolution were kept in power, and the young biology teacher from Tennessee was punished with a fine), then the fundamentalism compromised itself in the eye of the public opinion. It was until 1968, in the case of *Epperson v. Arkansas*, the Highest Court in the US claimed banning teaching of the theory of evolution as opposing the constitutional regulation of the division of church from the nation, which was included in the First Amendment. The opponents of evolution changed their strategy concentrating on the introduction to schools of teaching the scientific proofs for the benefit of the thesis on the world creation, and resigning from the creationism referring to, above all, the Biblical description of the creation. They described their attitude as the creation science so as to avoid the claim of propagating religion at schools. As an answer for bringing back the theory of evolution to schools, there was created a movement for the benefit of spending the same amount of time, so-called equal time, on teaching of the two attitudes, the evolutionism and creationism; the laws were introduced, among others in Louisiana and Arkansas. The law demanding teaching the creation science together with the theory of evolution was thought by the regional court as constitution infringement in the case of *McClellan v. Arkansas Board of Education* in 1982, and the Highest Court maintained the verdict in the case *Edwards v. Aguillard* (1987). The supporters of creationism contributed to the fact that the biology textbooks in some states had a warning on the cover, one which said that the theory of evolution is controversial and has only hypothetical character¹³. In other cases biology teachers were obliged to read out such a *caveat* before the lesson on the theory of evolution started. It was thought to be disagreeable with the constitution in the cases of *Freiler v. Tangipahoa Parish [La.] Board of Education* (1999) and *Selman v. Cobb County School District* (2005), in spite of the fact that the warnings did not include any religion references.

The latest proposition of the evolution opponents is a theory of an intelligent design. In 2004 owing to the suggestion of the School Board in Dover in the state

¹² See D. Motak, *Nowoczesność i fundamentalizm. Ruchy antymodernistyczne w chrześcijaństwie*, Kraków 2001, pp. 79–80.

¹³ E.C. Scott, *Antievolution and Creationism*, p. 279.

of Pennsylvania the viewpoint was included in the Biology teaching program, obviously next to the theory of evolution. The District Court decided, in the case of *Kitzmiller v. Dover Area School District* (2005) that the theory of the intelligent design is not of a scientific character, but in a camouflaged way propagates the religious vision of the world creation by “an intelligent Designer” and is in itself a violation of the principle of church and nation division¹⁴.

4. The causes of antievolutionism

Where is the aversion towards the theory of evolutionism coming from? The priest Michał Heller explains this as a weak knowledge of the faith content and problem exaggeration by “not fully educated supporters of religion”¹⁵. At least in the American context the case seems to be even more complicated. The question of evolution in public schools is associated not only with the religious beliefs (especially with the literal interpretation of the infallible Holy Bible) of parents and students, but also with the deeply rooted attachment to the autonomy of school boards in the teaching program description, with the problem of competence division between the federal government and single states, and finally – with the conflict between parents’ rights to bring up children according to their beliefs and the children’ rights to have their own opinion. The protests against teaching the theory of evolution in public school is not only a sign of the dramatic ignorance of Americans in the field of science. Such a hypothesis of ignorance could explain the lack of knowledge of the theory of evolution, but it does not explain the active trials to replace the teaching of it with the version of creationism. The problem should be seen in a wider perspective – subjectively felt – cultural marginalization of the group of evangelic Christians.

In 1962 in the case of *Engel v. Vitale* The Highest Court decided that the rejection of the over-beliefs prayer, created by the board of the public school, a prayer for the beginning of the day is disagreeable with the constitutional principle of the church-nation division. The decision was opposed by the public opinion: in the Gallup survey as of 1964, 77% of the asked people supported the proposition of the constitutional amendment, one which allowed to say the prayer¹⁶. In 1963 the

¹⁴ D. Masci, *From Darwin do Dover: An Overview of Important Casus In the Evolution Debate*, The Pew Forum on Religion and Public Life, Washington, D.C. 2005.

¹⁵ M. Heller, *Element przypadku*, an interview by G. Jasiński, “Newsweek” 2006, No. 43, p. 73.

¹⁶ M. Servin-Gonzalez, O. Torres-Reyna, *Trends: Religion and Politics*, “Public Opinion Quarterly” 1999, Vol. 63, No. 4, p. 6000

practice of a morning Holy Bible reading in public school was thought to be infringement of the First Amendment (*School District v. Schempp*). Both of the decisions have been received by numerous Christians as a dramatic sign of the nation rejecting the fundamental principles, as were established by Fathers Establishers of the US in the Independence Declaration and Constitution. Several people thought that God was “expelled from school” which resulted in the increase of violence among young people and their demoralization. The thing that made it even worse was the decision of the Court in the case of *Roe v. Wade* as of 1973, one which allowed to perform abortion – millions of evangelicals felt like a minority discriminated in their own country.

Obviously in the case of the supporters of the creationism in the American society it is hard to talk about the minority in the static sense. However the researchers of the cultural domination relations point out that the minority status is of subjective character: such a group which dominates numerously, and also such a group which is thought by other groups, objectively, to be dominant may still feel dominated¹⁷. It is well but partly depicted by a humoristic note by Peter L. Berger on the topic of the status of religious people in the US. He pointed out that if we consider the Hindu nation as the one to be the most religious, and at the same time the Swedish nation to be the least, then we can say, metaphorically, that Americans are a society of Hindu people governed by the Swedish elite. Very similar point of view was expressed by Stephen L. Carter in the book *The Culture of Disbelief*, describing the marginalization of viewpoints of people who are said to believe (who are a dominating percentage of the American society) from the side on national institutions – such as courts and public schools – and a part of the opinion-creating environments. In his opinion, in the legal and political spheres there is a trend increasing concerning treating religion as an irrational, arbitral and totally private choice of a human being. It happens very often that the religious orders that regulate the lives of believers lose when confronting legal regulations; it happens especially in the case of the religion of minorities. As Carter says: “in contemporary America religions are treated as changing viewpoints (...). If you cannot get married once again because of your religion, then why not to believe in something else! If you cannot take an exam because it is on the day of a religious festival, then why not celebrate a religious festival of a different religion! If the government decided

¹⁷ See J. Mucha, *Dominacja kulturowa i reakcje na nią* [in:] idem (red.), *Kultura dominująca jako kultura obca. Mniejszości kulturowe a grupa dominująca w Polsce*, Warsaw 1999, pp. 26–53; idem, *Dominant Culture as a Foreign Culture: Dominant Groups In the Eyes of Cultural Minorities – Introduction* [in:] idem (red.), *Dominant Culture as a Foreign Culture: Dominant Groups in the Eyes of Minorities*, New York 1999, pp. 7–24.

to damage the holly ground for you, why not think about a different ground as being holly! If you must work in Sabbath – do not worry about it! This is only a day free of work! Why not choose a different day! If you cannot undergo blood transfusion because you think that your God does not allow it – it is not a problem! Choose another God! The whole trivializing rhetorics has the one message: pray if you want, worship God, if you have to, but whatever you do, do not take your religion too seriously”¹⁸. One does not have to add that Americans think that contemporary science and intellectual elites treat tolerantly the faith in the dogma on the creation. In the given interpretations all the parents’ efforts to make schools teach their children the description of creation parallel to the theory of evolution is not a sign of narrow mindedness or the lack of elementary knowledge, but the parents’ care so as not to let school weaken the religious outlook, an opinion that they try to root in their children.

The problem is that sometimes the outlook collides with the state of the contemporary scientific knowledge. The main reason of the theory of evolution rejection by a great number of Americans is the doctrine of the literal interpretation of the Bible content, and at the same time the literal interpretation of the Biblical description of the world creation within six days. The given doctrine is one of the vital points of the religious outlook of protestant fundamentalists, however, it is also supported in wider evangelical circles¹⁹. The opposition towards evolutionism is not exclusively the domain of the conservative Christians: it is rejected by both ultra orthodox Jews and Muslims. In the opinion of the creator of „the scientific” creationism, R. Morris, “the evolutionism is situated at the base of communism, Fascism, Freudism, social Darwinism, behaviourism, the Kinsey’s theory, materialism, atheism, and in the world of religion also modernism and neoorthodoxy”²⁰. If a man derives from an ape, and indirectly from a common for every species ancestor, then there appears a question of the traditionally thought direct and close relation with God. Moreover, if we were to agree that the Holy Bible in its first verses is only an allegory, there is a threat that the whole Holy Bible is going to be thought as imperfect and of different interpretations also in its ethical layer. Although the acceptance of the theory of evolution and even wider – the scientific

¹⁸ S.L. Carter, *The Culture of Disbelief: How American Law and Politics Trivialize Religious Devotion*, New York 1993, pp. 14–15. See also the classic work on the subject of the American “cultures war”, of which the element is the disagreement of the creationists with evolutionists: J.D. Hunter, *Culture Wars: The Struggle To Define America* (New York 1992) and the book J. Petra-Mroczkowska *Amerykańska wojna kultur* (Warsaw 1999).

¹⁹ See D. Motak, op.cit.; K. Armstrong, *W imię Boga. Fundamentalizm w judaizmie, chrześcijaństwie i islamie*, Warsaw 2005.

²⁰ Quote for: E.C. Scott, *Antievolution and Creationism*, p. 264.

explanations – does not have to exclude *all* religious explanations, undoubtedly it does exclude *some* of them. This is why the opposition as for the theory of evolution seems to be a rational trial of the protection of *some* religious outlook integrity against the chaos of a complete freedom and relativism.

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