

# Islamic Scientific Creationism

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At the time that "Creation Science: A Successful Export?" was published in *RNCSE* (Matsumura 1998), there was an notable debate among intellectuals, scientists, lay people and fundamentalist Islamists concerning Islamic scientific creationism in Turkey. Since the early 1990s, the Science Research Foundation (Bilim Arastirma Vakfi, or BAV) has undertaken a new mission of spreading an Islamic version of scientific creationism in Turkey, the ideology of which was mainly imported from the US. However, it was not until late 1998 that many scientists and academics, as well as Turkish science institutions, such as TUBITAK (the Turkish Scientific and Technical Research Council) and TUBA (the Turkish Academy of Sciences), protested the pseudoscience of BAV and published declarations against Islamic scientific creationists. To understand better the Islamic scientific creationism movement in Turkey, it is expedient to review the history of the Turkish Republic and the rise of Islamic fundamentalism in Turkey.

## The Turkish Republic: A Unique Democratic and Secular Islamic Country

Turkey is one of the few secular and democratic Muslim countries. Ninety-nine percent of the population is said to be Muslim — although the definition of "being Muslim" in Turkey makes it unlikely that all of these Muslims practice orthodox Islam. In most of the other Islamic countries, *Sharia*, Allah's Law for Muslims, dominates the constitution and the legal system, so that the state and the religion are united. Separation of the state and religion remains alien and unrealistic to such countries. In contrast with the constitutions in many other Islamic states, the Turkish Constitution forbids the religious laws from dominating government and society and requires that the state and religion be separated (Article 2, Turkish Constitution [revised in 1982]).

The Turkish Republic was founded in 1923 after the fall of the Ottoman Empire and a period of revolution and reformation led by Mustafa Kemal Atatürk, who became Turkey's first president. When the new republic was formed, the government took many precautions to prevent Islam from being as influential in

governance as it was during Ottoman times. Among these reforms were replacing the Arabic alphabet with the Roman alphabet, which is more suited to expressing the Turkish language; granting equal rights to women; and reforming education, including the elimination of compulsory religion courses and the introduction of evolution theory as an important part of the biology curriculum. Prayers once recited only in Arabic were translated into Turkish, so that everyone could understand them; religious education based in extremist sectarian centers called *Tekkes*, *Tariqas*, and *Zaviyes* was banned; and a new legal system based on a European model was adopted. In 10 years (1923-1933), a new modern Western country, with a new identity and ideology, was quickly created from an oriental empire. There was a clear-cut shift in the whole state precept, including secularism.

When Atatürk died in 1938, there were still many other reforms of governmental and cultural affairs to be finished, for the improvement of the new country. After 1950, the Enlightenment-based ideals and reforms of the revolution started to decline. Right-wing and conservative cliques and political parties were ready to exploit the weaknesses of the inexperienced government. Some of the social changes and civil rights attained by the revolution in 1923 were lost. Some politicians appealed to the uneducated and illiterate majority of Turks, who were still very religious and strongly influenced by local religious authorities (*Sheiks* and *Mullahs*), who promised a return to the good old Ottoman days. This turmoil continued until the military coup in 1960. A new constitution based on a Western legal system was approved in 1961, which banned efforts to support the establishment of a non-secular religious state based on *Sharia* Law.

Despite this setback, fundamentalist self-assertion continued into the 1970s. Various fundamentalist parties founded and headed by Necmettin Erbakan were able to attract as much as 9% of the vote, while other right-wing parties also continued to appeal to religious sentiments in order to attain power. In 1980 a right-wing junta headed by Kenan Evren took power, warning of the threat of communism. This was a milestone for the fundamentalists and extreme religious groups, which started to gain even more power. Soon Evren was succeeded by Turgut Özal, an active member of a religious order.

Fundamentalist groups organized within the government, in the bureaucracy, in the armed forces, and among the public, while the secularist, leftist opposition was suppressed. During the 1980s and 1990s, thousands of writers, scientists, journalists, and ordinary people suffered years of imprisonment for criticizing Evren's regime. During this period, no critique of or comment on the possible consequences of the deeds of the government was allowed, since this would be considered a thought crime — the equivalent of being involved in a conspiracy against the Republic, and being a separatist or even a communist. The fundamentalist vote increased to about 20% through the 1990s before declining to 16% in 1999. The main aim of one of these fundamentalist parties (known as the Welfare [*Refah*] Party), as stated many times by Erbakan and other party members in public talks, was to establish a theocratic and *Sharia*-based state (as in Iran or Afghanistan) through civil war and to promote *Jihad* (religious war).

By the late 1990s, things began to change. On February 28, 1997, the National Security Council responded to the fundamentalists and took steps to protect the constitution and the secular-democratic structure of the state by issuing a strong declaration that the Turkish military would protect the constitution and its secular and democratic system by any means necessary. The government toppled, and in 1998, the supreme court revoked Erbakan's senatorship and disbanded the Welfare Party. A few months later, the fundamentalists re-organized under the name of the Virtue (*Fazilet*) Party.

The Islamic version of "scientific creationism", as promoted by BAV, sprang up and gained power under these circumstances in the early 1990s, with the support of the Islamic fundamentalists and radical Islamic sects (*tariqas*).

## Islam and Creationism

The Qur'an, like the Bible, accepts the creation of the universe, the earth, and life on earth by Allah (the God of Muslims) in 6 days. According to Islamic sources and the Qur'an, Allah created the soil first, then the mountains, light, and the animals, and then Adam (Qur'an: *Hjcr* 26-29; *Zumar* 6; *Ta Ha* 116-119; *Baqarah* 31-34, 36-37; *A'raf* 19; also see Arsel 1996, 1997a, 1997b, 1999; Dursun 1992). Adam is created from the soil. However, scholars acknowledge that the Qur'an has been modified and rewritten through the centuries (Lebster 1999; Dursun 1992).

The Qur'an accepts the divine validity of the information presented in the sacred books of Jews and Christians; consequently the creation accounts in the other sacred books are also accepted by the Qur'an. In the Qur'an, the description of Adam and Eve's adventures in Eden is not as detailed as it is in Genesis, but it is obvious that the creation story in the Qur'an was influenced by Genesis. However, the Qur'an provides no basis on which to estimate the age of the earth, in contrast to the scriptural accounts that form the basis of much of Christian "scientific creationism".

## Science in Islamic Culture

In Islam, philosophers use the word *ilm* to refer to *science* in the broader sense of human knowledge, which can accommodate religious as well as natural studies. In contrast, the Western tradition sees science as a valuable way of describing and predicting the natural world without reference to any religious precepts. Christian fundamentalists promoting "creation science" cloak religious precepts in the trappings of science because of the pre-eminence of scientific method in Western countries. However, such an approach was rare in Islamic countries, where science emerged in a different cultural and religious context—that is, until BAV arose as an Islamic missionary to become the Muslim champion of "scientific creationism" in Turkey and in other Islamic countries.

BAV's activities are integrally connected to the rise of Islamic fundamentalism in Turkey, where secularism and science have become rooted to some extent and more strongly established than in many other Islamic countries (Sayin 1998a, 1998b; OECD Report 1996). In the style of the Institute for Creation Research, BAV is now trying to supply "scientific" data to the public that, it proposes, proves the religious accounts of the creation, instead of appearing to appeal strictly to dogmas or sacred books.

Even though the Qur'an describes the creation of life on earth as a purposeful action by Allah, some Muslim philosophers have defended evolutionary ideas based on the notion of the Great Chain of Being. This interpretation is similar to that advanced by Christian theistic evolutionists, who claim that evolution is also created by God. One such philosopher was Ibn Khaldun (1332-1406), who proposed an evolutionary theory in which created life originated from minerals, evolved into plants, and then evolved into animals.

Ibn Khaldun wrote:

It should be known that we — May God guide you and us — notice that this world with all the created things in it has a certain order and a solid construction. It shows nexuses between causes and things caused, combinations of some parts of creation with others, and transformations of some existent things into others, in a pattern that is both remarkable and endless. ...Each one of the elements is prepared. It started out from minerals and progressed, in an ingenious, gradual manner, to plants and animals. The last stage of minerals is connected with the first stage of plants...The last stage of plants is connected with the first stage of animals. ... The word "connection" with regard to these created things means that the last stage of each group is fully prepared to become the first stage of the next group (Ibn Khaldun 1967: 194-5).

Ibn Khaldun is also one of the philosophers who suggested that humans evolved from apes:

The animal world then widens, its species become numerous, and in a gradual process of creation, it finally leads to man, who is able to think and to reflect. The higher stage of man is reached from the world of monkeys, in which both sagacity and perception are found, but has not reached the stage of actual reflection and thinking. At this point we come to the first stage of man after the world of monkeys. This is as far as our physical observation extends (Ibn Khaldun 1967: 195).

Al-Afghani (1839-1897), who initially opposed the theory of evolution, later accepted it, proposing that Muslim thinkers preceded Darwin in advocating the theory of evolution (Bezirgan 1972).

There is considerable room for interpretation within Islam as to the date of the Creation, since there are no explicit statements about it in the Qur'an as there are in the Bible. Other aspects of the Qur'an afford room for interpretation as well. In one place in the Qur'an, a single day is said to correspond to 1000 years, yet in another verse, a day is said to correspond to a period of 50 000 years (Edis 1994). Thus geological time scales do not disturb the Muslim conception of creation (Edis 1999). It is also interesting that those contradictions and many uncertainties in the Qur'an do not disturb Muslims, and the interpretation of the *surahs* (parts of the Qur'an) can vary depending upon the circumstances or the reader (see Dursun 1992; Arsel 1996, 1997a, 1997b, 1999).

## Teaching Religion, Creationism, and Evolution in High School in Turkey

During the Ottoman Period (13th-20th centuries CE), *Medreses* — Ottoman schools for teaching science and religion, roughly equivalent to sectarian religious universities in the West — taught Islam and the Qur'an as a part of the official curriculum; science was seen as a small part of religious education. It was not only compulsory to learn the Qur'an, but also to believe it under penalty of imprisonment, exile, or execution by order of *Sharia* judges. There was no tolerance for contradictions between science and creation according to the Qur'an. Ottoman religious authorities banned printing presses and kept Ottomans isolated from the Renaissance, Reformation, and Enlightenment until late in the 18th century.

When the Turkish Republic was established in 1923, the whole education system was reformed from high school to the universities. Atatürk himself wrote some chapters in the famous *Tarih ve Medeni Bilgiler* (*History and Civilized Knowledge*) textbook for high schools, which defended evolution, materialism, and Western science (Afetinan 1968; Perincek 1994). The participants in the reforms of the Turkish Revolution included intellectuals, scientists, politicians, law professors, and so on, who were educated in Europe (especially France and Germany). Between 1928 and 1948, books about quantum theory, relativity, evolution, Western literature, and modern and classical art were translated into Turkish by the government

and delivered to people for free or at low cost. Creationism and compulsory religious instruction were nonexistent in the education system of Turkey during this period.

Under the rising influence of the fundamentalist party of Erbakan through the 1970s, the right-wing governments made religion courses, as well as the recitation of prayers in high schools, compulsory once again. Memorizing and reciting Arabic prayers became obligatory in the 1980s. Thousands of Qur'an courses followed, some outside of the high school curriculum, but all meant to institute government-sanctioned religious instruction.

At first, creationism was taught only in religion and ethics classes in high schools (Ayas and Tumer 1994). Later, in the mid-1980s, creation was made compulsory in biology courses (Kence 1985, 1995; Edis 1994). In 1985 Vehbi Dincerler, the Minister of Education in Ozal's government and a member of a religious *tariqa*, sent a bulletin to high schools that accused educators who taught and defended evolution of being communists. The fear of communism was as effective for intimidating people in Turkey as it was in the McCarthy era in the US and has been used successfully more recently by BAV to combat evolution.

Thus creationism was introduced to high school biology textbooks as an alternative "hypothesis" (Güven and others 1985). This form of creationism was mostly adopted from Henry Morris's *Scientific Creationism* (Morris 1974), which was translated into Turkish by the Ministry of Education in 1985. Creation was explained in the biology textbooks as follows:

In creationism's opinion, all living entities and species were created by Allah separately. Although they may have undergone some changes since the day they were created, neither did any evolve into other species (Güven and others 1997: 68).

Even though evolution was still *in* the textbooks, it was taught in a biased, ludicrous, and non-scientific way, so that it could be discredited easily by some of the religious high school biology teachers. One of the ridiculous statements found in the high school books is:

contrary to what evolutionists claim, it has been demonstrated that frog, mouse, and snake bloods are closer to human blood than that of monkeys (Ayas and Tumer 1996: 12).

Another sentence misconstrued Darwinism by stating that

according to Darwin, strong ones would live, and weak ones would be eliminated. However strong organisms such as dinosaurs, and mammoths have become extinct, whereas some weak organisms such as earthworm could survive (Ayas and Tumer 1996: 13).

When the Social Democrats came to power in 1998 under prime minister Bülent Ecevit, the biology textbooks were revised, and chapters related to Darwin and Lamarck were rewritten more objectively (Korkmaz and others 1998). Creationists' arguments were still presented as alternative hypotheses, but to make the books appear more secular, phrases such as "according to Islam" were replaced with "according to sacred books".

The modifications in the biology textbooks infuriated and mobilized those who wanted evolution to be taken out of the curriculum, including fundamentalists and BAV. The result was a series of belligerent actions against Turkish scientists at universities and at institutions such as TUBA and TUBITAK.

With its considerable political support, it seems that BAV could achieve its goal of replacing evolution with

a form of creationism. The BAV aims to convince the majority of the politicians in the parliament that evolution is not a fact, but a hoax. In February 1999 a representative from the fundamentalist Virtue Party proposed a *Bill of Anti-Evolution* to ban teaching of evolution in the schools and to collect and destroy all the books about evolution in the official libraries, on the grounds that evolution is against Islam (*Hurriyet*, March 9, 1999).

## BAV (Science Research Foundation) and its Activities

BAV is a radical fundamentalist foundation established in 1991 by Sheikh Adnan Oktar. It is an integral part of the rise of fundamentalist Islam in Turkey. BAV is not an independent organization and the source(s) of its funding remain very obscure. Its activities and publications utilize millions of dollars each year, so it is difficult to imagine that this amount of funding can be supplied *just* by donations, as some at BAV claim. The newspaper *Hurriyet* recently revealed that Adnan Oktar and BAV have strong connections with Necmettin Erbakan, the former leader of various fundamentalist parties. The newspaper *Cumhuriyet* recently reported that other support for BAV comes from Fettullahcilar — a *tariqa* established by Fettullah Gulen, who used to preach the evil and wickedness of evolution (*Cumhuriyet*, June 29, 1999).

BAV has also published several books under the pen name Harun Yahya and has delivered copies to the public free of charge. It is generally believed that Harun Yahya is actually a commission formed by BAV, although recent reports have claimed that Harun Yahya is Necmettin Erbakan or a collaboration between Erbakan and Adnan Oktar (*Hurriyet*, September 13-15, 1999).

However, considering the vast range of subjects and the sheer number of books — from *The Qur'an-Islam, Free Masonry and Anti-Semitism* to *Evolution and Molecular Biology* — it is unlikely that Harun Yahya is a single person. Both BAV and Harun Yahya are still poorly understood. No one claiming to be Harun Yahya has made any public appearances or has granted any interviews.

BAV has a long history of contact with American creationists, including receiving assistance from ICR. Duane Gish and Henry Morris visited Turkey in 1992, just after the establishment of BAV, and participated in a creationist conference in Istanbul. Morris, the former president of ICR, became well acquainted with Turkish fundamentalists and Islamic sects during his numerous trips to Turkey in search of Noah's Ark (*Acts & Facts* 1998a, 1998b). BAV's creationist conferences in April and June 1998 in Istanbul and Ankara, which included many US creationists, developed after Harun Yahya started to publish his anti-evolution books, which were delivered to the public free of charge or given away by the daily fundamentalist newspapers *Akit* and *Zaman* as promotions.

BAV also organized local conferences on creationism in almost every major city and town in Turkey (about 120 locations) about creationism, defending Harun Yahya's claims (Harun Yahya 1997) and similar arguments by ICR (see <http://www.geocities.com/evrimkurami> for details). The main premise of the conferences was that science has disproved evolution and proved the truth of creation (for details of these conferences and more information, see the web pages attributed to Harun Yahya <http://www.harunyahya.org> and BAV <http://www.bilimarastirmavakfi.org>).

## Turkish Scientists Respond to BAV

During the early 1990s, when Harun Yahya's small inexpensive books started to circulate among the public, academics did not take BAV and Harun Yahya seriously, despite the long continuing dissonance between university and scientific circles and right-wing governments over democracy, secularism, and the creation/evolution issue. University academics simply ignored the books, and most of the biology and medicine professors considered it beneath their dignity to answer the arguments of Harun Yahya and other creationists. A similar position was taken by the intellectuals before 1980s — disregarding the majority of the public and some peripheral movements was an important factor that probably contributed to the rise of fundamentalism in Turkey (for details, see Narli 1999).

However, at the turn of the millennium, scientists and academics in Turkey realized that they were besieged by fundamentalist Islamists and a public convinced by Harun Yahya that evolution has collapsed. Even so, most of the scientific organizations and university professors remain unmoved to act against the pseudoscience of BAV. However, the authors of this article believe that defending science and evolution is indispensable in a democracy, and we believe that every single statement of Harun Yahya and BAV should be opposed by using scientific knowledge. As a part of our effort to do so, we have written numerous articles to defend evolution and inform the public about what science really says (see Kence 1982, 1985, 1994a, 1944b; Sayin 1998c, 1998d, 1998e).

After BAV's conferences in 1998, we organized an independent commission to answer the arguments of BAV and to warn the public about the pseudoscience of Islamic scientific creationists. The short-term goals of the commission were to:

- 1) Publish declarations about the scientific facts to the public in response to the activities of BAV;
- 2) Gather support from scientists in Turkish universities;
- 3) Write and/or translate books about evolution and inform the public, as well as other scientists, about current scientific information;
- 4) Contact other centers, foundations, and scientific institutions, especially in the US and Europe, that are also defending science and evolution against scientific creationists;
- 5) Publish and distribute answers to the arguments of the Islamic creationists and their pseudoscience; and
- 6) Inform governmental agencies, universities, schools, and the mass media about the danger of Islamic creationists and their pseudoscience.

This commission made 2 declarations to the public about Islamic scientific creationists in October 1998 and January 1999. In addition, more than 2000 university professors and scientists, along with TUBA and TUBITAK, signed and supported the first declaration. A similar commission had already been formed by TUBA, which also issued a separate declaration in the summer of 1998 defending science and evolution (TUBA 1999; for TUBA's declaration, connect to <http://www.geocities.com/evrimkuram> ).

When BAV realized that scientists and scientific organizations were publicly opposing its campaign, it responded by trying to intimidate the members of our commission and TUBA, accusing them of being

communists, Maoists, atheists, and separatists. Each issue of the BAV bulletin was distributed by mail and by fax to 11 793 addresses, including the high courts of the state, the attorney general's office, district attorneys' offices, governorships, army headquarters, police headquarters, and various government offices. Furthermore, BAV included photographs of some of the scientists and described them as Maoists. The addresses and names of 6 members of the commission were published in the militant fundamentalist daily newspaper *Akit* (December 2, 1999). *Akit* published the names and photographs of some of the scientists from the commission (Aykut Kence, Isik Bökesoy) who were giving public lectures on evolution, accusing them of spreading propaganda and atheism.

However, BAV's intimidation tactics did not succeed. Academics and researchers in universities and scientific organizations were galvanized into action by BAV's tactics. Some of the authors of the declaration, Professor Aykut Kence, Professor Yaman Ors, Professor Isik Bokesoy, Professor Dincer Gülen, Dr Umit Sayin, and Dr Serhat Ozyar, whose names were particularly targeted in the BAV announcements, filed a complaint in the 3rd Civil Court of Ankara against BAV over its accusations. In May 1999, the court ruled against BAV and ordered it to pay the equivalent of \$6000 to the scientists for damages (*Cumhuriyet*, June 25, 1999; for the English translation of this news, see <http://www.geocities.com/evrimkurami/press.html>).

## Islamic Scientific Creationism and its Christian Allies

Even though they are using arguments that ICR has developed and passed on to them, Islamic creationists usually adapt ICR's arguments to fit their view of Islam or construct their own arguments to meet their own objectives for defeating evolution. So the Islamic creationism of BAV is not merely a carbon copy of ICR's creationism; it has its own style and format.

Part of the difference between ICR's and BAV's versions of creationism relate to their different scriptural bases. The flexible and interpretable text in the Qur'an allows BAV to avoid the issue of the date of creation. In contrast to some of the ICR's positions, BAV asserts that the Qur'an does not give any date for creation and that the Flood may have been a local, rather than a worldwide, event.

Here are some examples of the basic ideas defended in Harun Yahya's books, which were also featured in the nationwide conferences (Harun Yahya 1997, 1998a, 1998b, 1998c). There are several points of departure from the creation model commonly promoted by the ICR.

- 1) Earth and life on earth were created by Allah all at once. There is no evolutionary process. No species has ever evolved into another species. Life was probably created on earth during the Cambrian Explosion.
- 2) The Qur'an is the best of the religious scriptures, so it does not make mistakes as do the other sacred books, such as estimating the earth's age as 10 000 years or asserting the occurrence of a worldwide Flood. The Qur'an is the ultimate scientific truth. Nothing can contradict the Qur'an.
- 3) Matter is an illusion of the mind. In truth, only mind exists; matter does not! The outside world is the illusion of the mind, and mind transforms and determines the reality. (However, they try to use data obtained from that illusory world to prove that evolutionists are making mistakes!)
- 4) Evolution is the greatest hoax of all centuries. All the scientific data collected during the last 150 years disprove evolution. All the scientific data prove that, from DNA to organisms, everything has a design and

purpose, and that everything was created all at once. Science has proved that Allah exists and created the life on earth.

5) Darwinists' or evolutionists' tendency to defend evolution is ideological, rather than scientific. They probably defend it because of their communist, materialist, Satanist, or racist ideologies. People who defend evolution are mentally ill, because they continue to defend it against all scientific evidence.

6) Humans are created in the image of Allah, so we cannot have evolved from apes, which are subhuman animals. Science has not found a single clue that apes are relatives of *Homo sapiens*.

7) Modern secular systems are the traps and deceits of Satan. (They are not against *science*, they say, but they oppose secular modern science and its cooperation with Satan. They propose the way of the Qur'an and *Sharia* as the ultimate and ideal way. Their understanding and definition of science are very obscure, especially since they deny that matter exists!)

8) Evolution is not a fact, because it is not reported in the Qur'an. (When they do not have information or evidence to explain a phenomenon, they cite some *surah* of the Qur'an and refer to the Qur'an as a scientific source. When they oppose theistic evolutionists, they claim that Allah could have created evolution, if he had wanted to, but since this is not reported in the Qur'an, it cannot be a fact.)

## Tactics and Pseudoscience of Islamic Creationists

BAV's tactics and strategies are also adapted from those used by ICR for decades. Most of the information, slides, figures, and ideas they use in their conferences resemble those long used in ICR presentations. A quick overview illustrates both the ICR heritage and the local adaptations in the BAV approach.

1) BAV uses pseudoreferences. The references they cite in their books and presentations usually support and defend evolution, but they take just one sentence that they think might seem to support their arguments and use it as their scientific reference. They claim that they can find scientific proof of creation in journals such as *Discover*, *Scientific American*, *Nature*, and *Science*, even though a cursory reading would show that these references support evolution, not creation. Because it is so difficult for Turkish readers to have access to these journals, however, most of Harun Yahya's arguments go unchallenged.

2) BAV never acknowledges the overwhelming weight of scientific research supporting evolution, but generally distort a single news item (for example, from a popular journal like *Discover*) to "prove" their conclusion. It does not discuss the fact that the rest of the article or other articles in the same issue of that journal defend and support evolution.

3) BAV first concludes that evolution is wrong and then tries to build up a whole system of "proofs". These proofs do not use any traditional logical and scientific methods to reach the scientific conclusions; instead, they cite the Qur'an as the ultimate (and also the *scientific*) truth. They even cite *surahs* as scientific references. Creation is an axiom, not a hypothesis to defend!

4) BAV rejects anything that opposes its ideology or that supports evolution. It does not accept any evidence that shows its proposals as unscientific. According to BAV, science is what proves the Qur'an — and BAV's interpretation of it.

These characteristics are consistent in approach and method with the ICR's version of creationism — selective citation, incomplete survey of appropriate literature, prior conviction that evolution must be wrong (and evil) with an emphasis on the scientific truth of scripture, and the conviction that "true" science must be concordant with scripture.

However, there are some significant differences between the approaches of these two groups. For the most part, Harun Yahya is not aiming for a sophisticated scientific presentation. Acting in Turkey, BAV does not face the difficulty of opposing a highly trained and prominent scientific community, as does the ICR in the US where some of the world's most sophisticated scientific knowledge is produced. BAV has not faced much resistance from the universities or scientific organizations until our recent campaign.

## Conclusions

Islamic scientific creationism has become a threat not only to science but also to democracy and the secular system in Turkey. Unlike Christian creationism, it is a critical part of the rise of an extreme religious movement and has actively contributed to the decline of democratic reforms and progress in scholarship and research in the Turkish Republic. If groups like the BAV are unopposed by Turkish science organizations, universities, the government, and individual scientists, they will continue their propaganda unchecked. If they succeed in their efforts, they will influence not only the believers but also the rest of the society, since there is a very weak scientific foundation among the vast majority of the Turkish public. We must recognize the power of the BAV's appeal and take a page from the successful opposition to the ICR and its allies in the US. The only hope for Turkish science and society is a vigorous campaign to expose and oppose Islamic creationism in every forum throughout the country.

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