

**George Kampis – Katalin Mund:
Evolution and Religion in contemporary Hungary**

1. The context

Immediately after Charles Darwin presented his theory of evolution in his two main works: *On the origin of Species by Means of Natural Selection* (1859) and *The Descent of Man, and Selection in Relation to Sex* (1871) an endless, fierce debate has commenced between scientists and the religious faithful. Darwinism is considered to be against Christianity in the following four respects:¹ 1. Species of animals and plants are continuously changing and evolving. The species that exist today came into being in the process of evolution, they did not exist before, and other species died out in the course of time. The theory questions the widespread point of view of protestant theology, and the usual assumption of the lay Christian, according to which the biblical creation-story should be understood as description of a one-time, unrepeatable act, one that formed the order of nature once and forever. 2. In the process of evolution, there is a struggle for existence, and in consequence of the fierce competition, some species die out. This loss contradicts divine dispensation. Natural selection according to Darwin reminded many people to the traditional problem of the evil. Why does an almighty and benevolent God tolerate the suffering in the world? 3. The next problem is connected to the seemingly accidental processes of evolution. According to the theory, evolutionary development is the outcome of several accidental events in which God's guiding hand obviously does not participate. 4. The largest difficulty was caused by the position of man. In the pursuance of Darwinism every species including man are results of a biological evolution, and there is no substantial difference between man and animals in respect of their origin and development. Traditional Christian thinking holds man superior to all other beings, the "crown of creation", the only one being created to "God's own image".

Speaking about evolution it should be noted immediately that evolution as a process should be sharply distinguished from the theory of evolution in the scientific point of view. The theory of evolution is just one possible theory, and there can be a number other theories besides or against it. The disproof of this theory would not disprove evolution in itself. Although *in principle* the evidences of the theory of evolution are radically different from the evidences for the fact of evolution, the actual situation is more complex, as in their present form both of them are based on Darwin, who considered them in unity. Yet, in spite of this complication, it should be clear that the difference exists. Unlike electrodynamics, the theory of evolution is currently nowhere from being a canonical, textbook theory that remains unchanged in twenty or fifty years in the future, and the researchers of evolution often do not agree on hardly any detail. Yet the *fact* of evolution is considered to be as sure in science as the fact of gravitation.

Although the official position of the Catholic Church has been significantly revised and relaxed in the questions of science recently, it is still ambivalent concerning evolution. In 1950 Pope Pius XII. spoke of the theory of evolution as a possible, serious hypothesis. Then, in 1996 October 22. Pope John Paul II. stated his position² in the Pontifical Academy of Science, that in possession of our new knowledge it can be ascertained now that *the theory of evolution is more than a hypothesis*, and it seems to play an important unifying role in the different territories of science. The news was generally interpreted in the sense that the Catholic Church accepted Darwinism. Nevertheless, careful reading of the text or of the

¹ Alister E. McGrath: *Tudomány és vallás*. Typotex, 2003. 253-254.

² A [pápai állásfoglalás](#) teljes szövege a [Katolikus Információs Hálózat](#) honlapján.

explanations of the Vatican³ it can be realised that this is not the case. Darwin's name was not mentioned at all, and the Pope talked about *various kinds of* rival theories of evolution. Still, the statement can be interpreted as saying that most parts of the explanation of the origin of living beings belong to the competence of science. Partly due to this development, faithful scientists play an important role in forming the opinion of the Churches, and scientists – mainly in the USA - often establish related associations to express their opinions.

Nevertheless, the evolutionary polemic that seemed to calm down was recently intensified all over the world. The situation is the most dramatic in the USA where beliefs about evolution have a special significance for more than one reason. A known sociological characteristic of American life is that it is strongly imbued with religion – or to be more precise, with a joined form of religion, politics and social order, where being an atheist is not just a subtle philosophical issue as in Europe but a support for anarchy, or worse, Communism. Obviously, with this background the questions concerning the juxtaposition of rational knowledge and faith gain a special importance. Evolution is certainly one of the key issues where the ends meet. It should also be noted that the predominantly Protestant American public does not have the canonical guidance for interpreting the biblical creation the same way as the Papal encyclicals serve the Europeans. American public opinion usually has to rely on the own, spontaneous, sometimes even naive interpretations of the faithful. In this situation, Creation and Science can easily come to constitute a contrast to each other: it is not particularly difficult to see that, taken literally, the biblical explanation of the world runs counter to the statements of science. Doubtlessly, a commitment to the social order (which in the above sense is a commitment to religion) biases the conditions when reducing cognitive dissonance. The bias may prefer religious belief to scientific knowledge. Note also that people who are not philosophers of science tend not to reflect on issues whether different ways of explanation, such as science and religion, have the same goal and method, that is, whether they speak about the same thing at all.

2. The Hungarian situation

The polemics on evolution seems to intensify in Hungary as well, although the Hungarian situation has a different characteristic mainly because of recent historical events. Following the second World War, after the Communist takeover, the official ideology had an openly hostile attitude towards every religion and every religious manifestation. In 1946 László Rajk, Minister of the Interior eliminated by a decree the social organisations and civil societies that belonged to or were connected with the Churches (e.g. *KALOT*, *KALÁSZ*, Hungarian Scout Association, etc.) The next important restrictive step was to bring the schools under direct government control and then to change the educational system so that Bible-classes became first optional subjects, then disappeared. In this way, churches were gradually losing the role they played in the socialization of the society. This secularization guided by the Communist Party meant also that the Churches were placed under a strict governmental supervision, their scope for action was radically narrowed down, and step by step, their competences were lost. In 1951 a State Office for Church Affairs was established to provide political control over the Churches. This was the place where decisions concerning positions in the Churches were made, and also this office exercised censorship over the publications of the books and newspapers of the Churches. Furthermore, political police (and the Communist state security authorities) were also present in this organization.

³ See [George Sim Johnston](#)'s article on the webpage of the Catholic Information Center, and [Mark Brumley](#) in Catholic Dossier.

A process of consolidation started in the second half of the 60s when Hungary re-established diplomatic relations to the Vatican. The most important event of the process was the meeting between János Kádár and Pope Paul VI. in the Vatican in 1977. This was the first time that the Catholic Head of the Church received a ruling Communist Party leader. From the 70's the Churches were allowed to broaden their charitable and cultural institutions as well as activities, although still within limited frames. In return for these concessions priests were usually loyal to the government, they did not directly question the "socialist" regime in their preaching, moreover, from time to time they actively participated in the actual political campaigns.

The autonomy of the Churches was restored at the end of the 80's, and in the beginning of the 90's. In 1989 the State Office for Church Affairs was dissolved, its orders invalidated. Monastic orders could start to work again, the presence of religious broadcasts in the media increased, the censorship of Church-related publications was abolished. The Parliament has declared the separation of the State and the Church, and pronounced that the freedom of conscience and religions is a fundamental human right in Hungary. The restriction of Bible-classes in the schools was repealed. Simultaneously with the transformation of the educational system several denominational schools started to work and by the beginning of the 90's the grounding of new Protestant and Catholic Universities also became possible.

Western Europe was characterised with a religious decline in the past few decades. The membership and the importance of the Churches continue to decrease (although the numbers are still higher than those in the former Communist countries). In the Eastern region the tendency is just the opposite. In the last half-century, religiosity in the East-Central-European region has covered a trajectory similar to a sinus-curve, with a recent maximum⁴. Manifestations of religiosity between 1947-53 – in spite of the hard persecution of the Churches – emerged to a higher level than that before the second World War. Hereupon religiosity seemed to stagnate for a short period. Between 1958 and 1978 in many countries of the region people have lost their religiosity at a speed and in an extent unparalleled anywhere else in the world. There are many different reasons for this. Usually the phenomenon is attributed to the hopelessness after the failed revolution in 1956, to the forced organization of collective farm systems and the collapse of the rural society, the fast expansion of the electronic mass communication, and to effects of the so called "goulash communism" (the emergence of a kind of Communist consumer society, with material values in the focus). 1978 was a decisive year. In 1978 the rate of a previously "underground" and hence invisible religious renaissance became statistically equal to the degree of lapsing from the faith. The former decreasing tendency stopped, and then turned back. Since 1978 the degree of religiosity has been showing a slow but continuous increase.

By the Communist regime a superiority and "final victory" of the scientific world view as the heir of XIX century positivism was propagated. During the decades the thinking of many generations was influenced by this point of view – which denied religions altogether, and which considered religion and science to be contradictory, in an irreconcilable way. Besides, a lack of access to authentic information characterised this period. As a consequence, entire generations grew up without even a basic knowledge concerning religions.

By the time of the democratic transformation in 1989 most people lost their own traditions, and many of them were misinformed or uninformed regarding other religious traditions. On the other hand, they were half-educated in the natural sciences as well. In addition to them, there were numerous religious churchmen, many of whom had to keep their faith for many years in secret, with growing frustration. Plus, there were the one-sidedly educated natural scientists. It is these people who together became the participants of the emerging spontaneous discourse on the relationship of science and religion in Hungary.

⁴ Tomka Miklós: *A magyar vallási helyzet öt dimenziója*. In: Magyar Tudomány 1999.5. 552-553.

Scepticism and criticism concerning evolution appear to increase recently. In 2003 March 18 there was a conference in Budapest organised by the *ÉRTEM* group.⁵ (That is, “*Értelmes Tervezettség Munkacsoport*”, in English: Intelligent Design Working Group.) Participants of the meeting addressed an open letter⁶ to the Minister of Education in Hungary in which he was asked to provide the theory of intelligent design an equal chance to become part of the curriculum at various levels of education. There were representatives of different religious groups and even one Catholic Bishop among the petitioners. The participants of the conference considered the theory of intelligent design to be a scientific challenger of the biological theory of evolution. The group consists of members from several religious backgrounds but all of them agree to refusing any intent and possibility whatever to reconcile Creation with Evolution.⁷ After the publication of the open letter a fierce debate unfolded on the columns of *Népszabadság*, the largest daily newspaper in Hungary.⁸

Along similar lines, lately in Serbia the education minister, Ms. Liljana Colic wanted to suspend the teaching of evolution in schools.⁹ Although her departmental order was later repealed, the scandal received a good press covering and the *ÉRTEM* group also made its voice heard several times.¹⁰ From time to time, they publish books and articles on the issue.¹¹

Although the Democratic Transformation in Hungary is already 16 years old, the educational system changes very slowly. This is partly because the schools have the same teachers as before, and partly because textbooks and curricular materials (especially in the natural sciences) are almost unchanged. In the meantime, more and more children grow up in newly religious families. For them, in lack of preexisting templates, it should be very difficult to establish a harmony between seemingly contradictory worldviews, especially when it is often their contradiction that teachers and textbooks suggest. What seems to be a much more profound effect, different fundamentalist religious groups appeared which try to constitute an ever-widening gulf between the territories of science and religion.¹² A very recent example for the controversial attitude is that a group called the “*Calvinist Creation Circle*” announced a competition for high school students to write essays to prove the *incompatibility* of biblical creation with evolution?¹³

3. The effects of background knowledge on the opinions

To understand the manifold relationship of religion and evolution in Hungary a national research-series on the issue was initiated by the History and Philosophy of Science Department of Eötvös University sponsored by the NKFP 05/093 program of the Hungarian

⁵ See: <http://www.ertem.click.hu/keret.cgi?/munkacsoprol.html>.

⁶ The letter can be read here: <http://www.ertem.click.hu/keret.cgi?/nyiltlevel.html>. See also: http://www.vinok.hu/hu/szolgalatasok/hirszolgalat/riportok/2003/intelligens_termeszet.shtml and <http://www.szkepszis.hu/>.

⁷ Although none of the official teachings of the traditional Churches reflect this extreme point of view on this question, the fact that some of the prominent representatives of the very same Churches participate in the initiative questions the general acceptance and effectiveness of these teachings.

⁸ See: Marosán György: „Alig tapad ez a sár!” (2003.05.12.), Tasi István: „Nem rajtunk múlik” (2003.05.21.) and Mező Ferenc: „Mogyorófavessző” (2003.05.26.) on <http://www.nepszabadsag.hu>

⁹ From BBC NEWS: <http://news.bbc.co.uk/go/pr/fr/-/1/hi/world/europe/3635794.stm>, Published: 2004/09/07 18:50:43 GMT

¹⁰ Ld. Tasi István: „Teremtés vagy evolúció” (*Népszabadság*, 2004.10.15.), valamint Válas György olvasói levele és Tasi István válasza: „Ki vezeti félre a nagyközönséget?” (*Népszabadság*, 2004.11.15.). Továbbá Tasi István olvasói levele a „Mit tesz Isten?” (*HVG*, 2004.09.25.) c. cikkhez.

¹¹ The latest one is: Tasi István (szerk.): *A tudomány felfedezi Istent. Intelligens tervezés – az evolúcióelmélet új riválisa*. Aeternitas Irodalmi Műhely, Bp., 2004.

¹² See e.g. www.szkepszis.hu, www.golgota.hu, www.geocities.com/magyarkreacionizmus/

¹³ See: www.kezdetek.hu

Ministry of Education. The project “*Religion and Evolution in the XX. century and contemporary Hungary*”, led by Prof. George Kampis, consisted of several subprojects and research topics, and included a historical study of the reception of the theory of evolution in Hungary, the analysis of contemporary debates on evolution in public media and documents (books and newspaper articles), research on the historical background and documentation of the public dialogue on evolution and religion, furthermore, the foundation of a Hungarian “Darwiniana”, an electronic archive for articles, books, and documents concerning the issue.

The sequel of this paper gives a brief account of the results of two surveys in the project. The first one was a survey accomplished by Katalin Mund.¹⁴ The research was examining the views of those who have factual knowledge about the matter of evolution (e.g. who learned about it at university, examined it in laboratories, etc.), people whose attitudes were not formed solely by a general world view they devote themselves to. Our questions we studied through opinions were the following:

- In what manner are the university students religious? Inasmuch as biology challenges the religious world view, the question arises whether students majoring in biology tend to be less religious than the average student – or the opposite.
- What is the relation between science and religion in general for a university student? Can religion encourage scientific thinking? Do insights of religion and insights of science complement each other, do they contradict?
- Do religion and science refer to the same reality at all?
- What contributes more to how a student thinks about evolution: is it his/her religious background or is it his/her university studies?
- Do students of biology have a problem reconciling theories of evolution and creation? Do they find a contradiction? How do they think the concepts are reconcilable, if they are?

Our database was provided by a survey conducted among students of two Hungarian universities (Eötvös University, Budapest and the University of Szeged) in the fall Semester of the academic year of 2003/2004. Questionnaires were completed during regular classes by 562 students, among whom 369 were students of Eötvös University and 193 students were from Szeged. Of all subjects, 318 students studied biology, 126 studied some other natural sciences and the rest of 104 undergraduates studied in the faculty of Humanities (an additional 14 students didn’t answer this question.)

The findings are in many respects counter-intuitive. The initial facts are like expected. Most of the students (70,3 percent) accept the theory of evolution, and just a very few (only 3,5 percent) gave a flat refusal. However, there is a third group of respondents who can only accept the theory to some degree. Most of them (26 persons) pointed to the “lack of sufficient evidence”. Several students admitted that their knowledge concerning evolution was incomplete. The second group with an almost similar size (22 persons) directly referred to religion as reason, that is, they can only accept the theory of evolution up to the point that “*it does not exclude the existence of God*”. Some of them seem to accept evolution liberally but consider religion to be just as important.

Most of those in the part-acceptance group who offered more or less scientific arguments confess themselves to be definitely religious, fifteen others confess to be religious in some respect, and there is only two students that are not religious. This means that almost everyone who can accept evolution only up to a point (or refuse it more or less) – at least those who defined their positions in details – are religious at least to a certain extent. 110 students answered that they can accept evolution “more or less”, among them there were 57 respondents who gave details. All of them except two were religious, which indicates that it is

¹⁴ For a detailed summary of the survey see: George Kampis – Katalin Mund ed.: *Vallás, tudomány, darwinizmus Magyarországon. (Religion, Science and Darwinism in Hungary)* Typotex, in press.

more important for the religious students to express their opinions on evolution than for the non-religious.

Although, as we have seen earlier, most of the religious students proved to accept evolution, there is an above-average ratio of refusal among them. The non-religious students usually accept evolution. Most of those who are religious in some respect also accept evolution, however quite a number of them indicated at least some problem accepting this theory. There was no student who is not religious and does not accept evolution at the same time. (That is, all who refused evolution were religious.) Of all studied criteria, the condition of being religious was the only criterion to refuse evolution.

At the beginning we expected to find a sharp difference between biology and other majors. Students of biology learn professionally about evolution and they can observe aspects of it at work in the laboratory. Our assumption was that their opinion wouldn't be as polarized as of those who don't precisely know what the theory is about. In the opinions of the latter, religion was supposed by us to play a larger role in refusing evolution, than in the biologist control group. Surprisingly however, we found no difference between the various majors.

To what extent do the years that students have spent at the university influence their responses? We limited this study to the students of biology. We assumed that the more time a student is exposed to biology, the more "direct" experience she or he can gain concerning evolution. Thus the expectation was that she or he has much more facts to consider in answering the question. Indeed, the study has shown that the earlier relation between religion and acceptance appears only in the first-year students. In the seniors the two variables, religiosity and the acceptance of evolution were independent from each other. The result supports our initial hypothesis. For a religious senior the answer is by no means easy for the challenge of evolution. The newly gained knowledge seems to prevent them to rely solely on their religion any more when they have to judge the theory of evolution. Unfortunately our sample was too small to draw a considerable conclusion, but this remarkable phenomenon needs further observation within the framework of a larger survey. The issue at stake is not less, then one of the most important aspects of the war between creationists and evolutionists: How well is the theory (and the mechanism) of evolution known by those who refuse it?

We also wanted to find out if the students think the two theories, evolution and creation, are reconcilable. It was assumed by us that the question is especially important for the religious students, also assuming they have already thought about it and tried to make the two views consistent with each other. On the other hand, the same question was perhaps never raised by the non-religious students, so they wouldn't think the two theories are reconcilable. Especially since in Hungary they possibly learned in the elementary and the secondary school that these ideas contradict each other.

The empirical result is that religious students do tend to think that evolution and creation are reconcilable theories, while non-religious students are more likely to believe that the theories contradict. Most of those who are religious in some respect hold the two theories to be reconcilable, however the ratio of irresolute respondents is also highest in this group.

Those following religions based on the Bible outnumber the followers of all other religions and the non-religious alike when it is about whether the two theories are reconcilable. The other groups usually prefer to chose that the different ideas of origin contradict to each other. To sum up, we can say that the religious are more likely to think that the two theories are reconcilable, while most of the non-religious respondents believe they tend to contradict. Assessing this question against other variables of the questionnaire, no significant differences were found between majors, years, and the further dimensions of the students' family background.

We also wanted to find out *how* the students think the two concepts are reconcilable. Three alternative answers were presented to them to select from: the official view of the

Catholic Church (as expressed in the Papal encyclicals: essentially a version of classical „duplex veritas”), the opinion of Teilhard de Chardin and the classical deist philosophical position. Students also had the possibility to express a fourth point of view in their own words. Most of the respondents (41,8 percent) turned out to think that both theories are true „in their own dimension”, or „at their own level”. Those who chose either the second or the third answer together amount to approximately the same size as the first group. An additional 14,5 percent of the students suggested something different.

This question was only answered by half of the students, i.e. those who answered yes to the previous question, whether the two theories are reconcilable. Most of the respondents were religious (89,4 percent), in compliance with our previous expectation. But we also wanted to know how the intensity of religiosity influences the students’ choice in marking one answer or another. The empirical finding is that the more determinate role religion plays in the student’s life the more likely she or he believes in God’s continuous presence (thus partially or fully rejecting evolution). And vice versa: the less intensive the practise of religion, the more likely the student accepts the official view of the Church or believes in some other compatibilist view with evolution.

Our result suggests that for deeply religious students the position of the Church is of lower importance than previously thought. It also turns out that the Church’s answer – that both theories are true at their own level – is attractive for the not-so-religious students not due to being the official point of view of the Church. Perhaps it is accepted because it is the one which is easiest to accept without internal conflict. This answer makes scientific research non-problematic, as here the results of science do not matter in believing in God or not. Similarly, doing science is not influenced by one’s religion.

The latter hypothetical interpretation appears to be supported by the answers of the biology students as well: Two-third of the seniors thinks that both theories are true in their own dimension, at their own level, as against the juniors who preferred this answer much less. It is very likely that after spending three or four years at the university, with studies about evolution and active experiments in the laboratories, the above solution emerges as the one that helps to minimize cognitive dissonance. Indeed, in the case of non-biologist students, the same table was independent.

Our third object of study was to examine the consistency of the students’ thinking. Part of the questionnaire was put together just for testing this issue. Students were asked if they could agree with seventeen statements concerning evolution. They were formulated sometimes in a religious approach, sometimes in a materialist way. Again our observation here was reduced to the biology students, because we assumed that they know this subject, while students of other majors may have never thought these questions before.

Within the limitations of this paper we can’t give the details of the results, again we will focus on a few key issues. Surprising results were obtained concerning the following statement: „*Living creatures’ apparent expedience actually doesn’t have any goal or meaning.*” Originally we assumed that religious students would refuse it against the non-religious students who would agree with it. There is indeed a significant difference comparing the answers to the religiosity of the students. Yet the reason behind an unexpected result is the response of the non-religious students. Although they accepted the statement in a higher ratio than the average respondent, yet 51,3 percent of them disagreed. The ratio remained the same when observed across the years. This is a peculiar result because the tested assertion grasps one of the most important elements, or rather to say, an essential feature of the evolutionary theory. The refusal of this idea by the (predominantly Christian) religious students is hardly surprising because the notion sharply contradicts the Christian world view. But why do the non-religious students refuse it? Our hypothesis is that maybe some old, deeply rooted intuitions, i.e. folk thinking works in them. In the dominant ideology of the

Communist system (and in particular in the “drop down form” of ideology: in education, in phrases and slogans, etc.) and similarly in the canonical religions there is no or little room left for accidents. It is plainly understood in both that everything has a goal and a meaning all of the time. Our hypothetical assessment of the answer is that either the respondents didn't understand evolutionary theory (where goal and purpose are excluded) or they don't want to understand it. It seems that whatever there is behind the phenomenon, it can't be changed by the years spent at the university, as there is no difference between the seniors and the juniors.

This result becomes especially interesting when compared with the test results for another statement, “*Every species including men is the result of biological evolution*”. This sentence is “savoured of a textbook” and accepted by the overwhelming majority of students (80,5 percent). Although, again, religious students are more likely to refuse this assertion, against the non-religious counterparts who usually accept it, yet, the majority of religious students (69,1 percent) also agree with this statement! At the first sight, this isn't a big contradiction, as a large part of these students is also in the group who think evolution and creation are reconcilable. Nevertheless the quoted results indicate that there are deep problems with the represented concept of evolution. How do students interpret this theory?

We used several statements to express more or less identical ideas, sometimes only in different words, sometimes with an opposite sign. It is worth comparing how students answer the questions with this kind of similarity. How consistent is their thinking? We can see for example, that those who think that “*every species including men is the result of biological evolution*” are not above the average to approve the assertion that “*the theory of evolution cannot explain the origin of certain species*”. Likewise, those who accept that “*the theory of evolution cannot explain the origin of certain species*” refuse that “*every species including men is the result of biological evolution*” in a ratio higher than the average. Yet, it deserves attention that there were 72 students (among them 61 juniors) who agreed with both sentences. That is, taken together, they seem to believe that every species is the result of a biological evolution and at the same time they also believe that the theory of evolution can't explain the origin of every species.

A similar inconsistency appears when comparing the following sentences: “*The evolutionary development is the outcome of several accidental events*” and “*The process of evolution has a goal and follows a direction*”. There were 52 students among the 297 respondents who could agree with both assertions. That is, they both think that “*the process of evolution has a goal and follows a direction*” and at the same time believe that “*the evolutionary development is the outcome of several accidental events*”. Even more interestingly, in this respect there is no difference between the juniors and the seniors: one of sixth in both groups accepted both sentences. And what opinions do those 36 respondents hold about evolution who could not agree with any of the two statements?

The following results are also hard to interpret. Those who think that “*the process of evolution has a goal and follows a direction*” refuse the statement that “*living creatures' apparent expedience actually doesn't have any goal or meaning*” in a ratio higher than the average. This is expected, and also those who think that “*living creatures' apparent expedience actually doesn't have any goal or meaning*” refuse the statement that “*the process of evolution has a goal and follows a direction*” in a higher ratio than the average. However, there were 14 students who agreed with both sentences. That is, they seem to think “*living creatures' apparent expedience actually doesn't have any goal or meaning*” and they also think that “*the process of evolution has a goal and follows a direction*”. But what kind of goal and direction does the process of evolution follow that according to them does not appear in the living beings? Perhaps it would be instructive to perform a separate study of sentence understanding among students.

It is also puzzling what those 72 students of biology may think who could not agree with any of the said statements? In the light of their answers they appear to think that living creatures have goals or meaning but at the same time the process of evolution does not follow an exact direction. Did a religious world view determine their answers? The fact that not all of them are religious seems to contradict to this idea: Among the 72 students in question, there are only 21 with deep religiosity, 35 of them are religious only in some respect, and the remaining 13 respondents are not religious at all!

It seems to be a more feasible explanation that the very concept of “goal” or “expedience” presents the problem. It looks as if, independently of both evolution and religiosity, the majority of students would prefer to believe that the natural or physical processes (including evolution and those of each and every living being) always have a goal, meaning or direction. So the students’ way of thinking and their world view is characterized by a certain default purposefulness, or we can call it a naive teleological attitude. Purposefulness and, consequently, a kind of internal rationality of life appears to be more acceptable for them than is contingency – which after all implies a kind of “irrationality” of evolution. Therefore, our conclusion is that the idea of evolution in its original, pure form seems to be hard to digest even for the students of biology and believers of the theory.

The survey has some significance beyond the evolution vs. religion issue as it questions the very nature of human thinking. Respondents seemed to prefer thinking in terms of commonplaces, in conventional patterns, stereotypes, unquestionable clichés originated in their nurture, in traditions etc. This may be the explanation for the inconsistencies and the contradictions in world views. It is also possible, of course, that these results stem from the still formative, not fully established personalities and intellectual world views of the respondents, as they were relatively young. But it is also possible that the results represent the contingency and inconsistency of all human thinking, a question worth future attention.

4. **The Relationship of New Religious Movements and Darwinism in Hungary**¹⁵

The validity of Darwin’s explanation is fiercely questioned in the Eastern European region not only by fundamentalists of the so-called historical churches¹⁶ but also by followers of several new religious movements (NRMs)¹⁷. Péter Török’s survey focused on this issue.

To examine systematically the new religious movements within Hungarian society it is a noteworthy enterprise, because such a project has not yet been pursued anywhere else. In the first phase of this research, the leaders of the NRMs have talked about their own belief system, history, demographic features, geographical location, their relation to the host society and other churches, etc. in the framework of a semi-structured interview¹⁸. The interviews covered about two thirds (63 percent) of the registered churches in Hungary. However, before entering into the discussion of the attitude of the NRMs towards Darwinism, we must deal with the difficult task of defining what counts as a new religious movement.

According to an internationally recognized scholar of sociology, “most of the movements referred to as part of the current wave of new religious movements are *new* in that

¹⁵ From a paper presented at the conference on „Theology and Science in Conversation: The Changing Contexts of Central and Eastern Europe”, Bratislava, January 31- February 2, 2003.

¹⁶ In Hungary, the Catholic, Reformed, and Lutheran Churches, and furthermore, the Association of Jewish Congregations are considered to be ‘historical’. The term is disputed by some of the NRMs.

¹⁷ We are aware of the sensitivity of the expression (Goswami, Mukunda 1995 “NRM is Four Letter Word: The Language of Oppression.” *ISKCON Communications Journal*. 3, 2 (December): 73-75), but in lack of a better name, we will use it hereafter. For the appropriateness of the expression, see, e.g. Beckford, James 1985 *Cult Controversies: The Societal Response to the New Religious Movements*. London: Tavistock

¹⁸ By a semi-structured interview we mean that although the inquiry consisted mostly of closed questions, the interviewees were encouraged to add whatever they considered necessary to illuminate an answer properly.

they have become visible in their present form since the Second World War”¹⁹. In the societies of Central and Eastern Europe, however, some religious organizations existed well before the end of World War II, but under the Communist era their operation was illegal or was allowed only under severely restricted conditions²⁰. As a consequence, they could function visibly only after 1990. The ISKCON, or as it is better known, the Society of Krishna Consciousness, for example, does not have a long historical background²¹, but in 1998, Hungarians were more familiar with it than with the different traditional orthodox churches, the Unitarians, Adventists or Methodists.²² All in all, these older religious organizations, along with several others are ‘new’ to the Hungarians. For the purpose of this study, however, we limit our analysis to those religious organizations, which commenced their operation in Hungary under Communism or after its fall.

Two questions probed the attitude of a NRM towards evolution. The first – with a simple yes/no choice, supplemented with a third possibility, i.e. that the theory itself is irrelevant to the belief system of the movement, and consequently, that there is no teaching about it²³ – asked whether the theory of evolution describes properly the origin of species. The second question offered an opportunity to locate this attitude on a 5-point scale to investigate to what extent, if any, the theory of evolution can be integrated with the belief system of the NRM.

Most of the new Hungarian religious organizations are very young. Two third of them were established after 1987, and half of them after the fall of Communism, 1990. Similarly, two third of the surveyed small churches are of Christian origin. The second largest religious tradition is Buddhism with eight different ‘churches’²⁴. About 10 percent of them do not have an organizationally accepted creed, in other words, they lack the necessary condition for a unified ideological background. Similarly, the proportion of communities without precise criteria for membership is about 10 percent. Theoretically at least, mixed membership²⁵ is possible in two third of the studied religious organizations.

Churches of the Christian faith in the subgroup of NRMs established in the post-Communist era make up only 54 percent, reflecting the influx of other religious traditions. These NRMs are characterized by a greater proportion of groups without an organizationally accepted creed (18 percent) or any precise criteria for membership (18 percent). The possibility of mixed membership is also somewhat higher (72 percent) than the average of all interviewed churches. In other words, ‘post-Communist NRMs’ give the impression to be less organized. These groups, furthermore, seem to attract the youth in greater proportions; almost half of them (47 percent) reported a younger membership than population average. In their gender distribution and moral teaching, however, these groups did not seem to differ from the other interviewed churches.

While two third of all interviewed religious organizations consider the teaching of the evolutionary theory about the origins of species unacceptable, the proportion of churches

¹⁹ Barker (1995:145), italics in origin.

²⁰ The Jehovah’s Witnesses, the Latter Day Saints of Jesus Christ, or as they are called, the Mormons and the followers of the Hungarian Religion are only a few of the several examples in the Hungarian case.

²¹ ISKCON was founded by A.C. Bhaktivedanta Swami Prabhupada in 1966 in the United States.

²² Two different surveys confirmed this finding see: Tomka, Miklós: „*Felekezeti különbségek a közvéleményben*” (Denominational Differences in Public Polls on the Familiarity with Different Religions) Pp. 32-52 in Szabó, L. – Tomka, M. – Horváth, P. (szerk.) ... *és akik mást hisznek?* Budapest: Balassi Kiadó, 2000.

²³ Apart from a Christian (Vineyard Church) and shamanist-nationalist religious organization (Ancient Hungarian Church), a Buddhist community (Karma Kagyupa) and another religious organization with Buddhist roots (Human Potential Independent Spiritual Order), chose this possibility.

²⁴ This does not mean that the membership of the Buddhist communities would be the second largest, because the overlapping of memberships is very characteristic for them.

²⁵ In other words, simultaneous membership in two or more religious organizations is permitted and/or conceivable.

established under Communism or after its fall²⁶ with the same view is even higher, 75 percent. In other words, these Hungarian NRMs are more anti-Darwinian than the pre-Communist, smaller, or non-historical churches. Of the non-refuting groups, 7 considered evolutionary theory appropriate, while in the belief system of 4 further groups there was no teaching about this question²⁷. Of the groups which considered Darwin's teaching acceptable, one Christian and one Buddhist group represented traditional or world religions, but the remaining 5 could not be placed in any of them²⁸.

The churches established after the fall of Communism tend to be more anti-evolutionists. While the ratio of NRMs accepting Darwinism to those refuting it is 1 to 3 among NRMs established under Communism, it is 1 to 8 among the post-Communist NRMs. While the majority of NRMs lacking precise criteria for membership are still anti-Darwinian, the proportion of these churches accepting an evolutionist teaching is much higher (33 percent) than the proportion of NRMs with similar attitude and precise criteria for membership (10 percent).

While the gender distribution of the groups with different attitudes towards Darwinism does not indicate much difference, the same cannot be said of the age distribution. Here, while the ratio of groups accepting Darwinism to the NRMs that refuse it is 1 to 2 among the churches with an age distribution similar to that of the whole society, the same ratio is 1 to 8 among the churches with a younger majority. NRMs established under the examined era with an older population refuse Darwinism without and exception. Finally, and probably less surprisingly, churches with a rather conservative moral teaching tend to refuse Darwinism.

5. The role and necessity of a dialogue

One of the central assumptions of the pilot project "Religion and Evolution in the XX. century and contemporary Hungary" was that an analytical understanding of the historical and contemporary context of the polemics about the theory of evolution vs. the religions would ease the tension. Of course a scientific project can not solve all problems. There is a need for more patience and goodwill from all interested parties.

Our results are somewhat discouraging. Apparently, at the various levels of secondary and higher education a balanced introduction of the relationship of religion and science would be necessary. Especially the biology and physics courses besides the courses on religion are suitable for encouraging such a discourse. This kind of knowledge would be extremely important in order to become part of the education of the future teachers of natural sciences.

How to change the situation? Regular meetings between the representatives of the different religious groups, teachers of religion and natural scientists and schoolteachers would be necessary in order to gain a profound knowledge about other's point of view and to have a real conversation. Our results indicate that there is much misunderstanding in the background. There are some positive initiatives nevertheless. One of them is worth mentioning because of its international scope. The Metanexus Institute (Philadelphia, Pennsylvania, USA) runs a "Local Societies Initiative" program sponsored by the Templeton Foundation which supports small discussion groups on science and religion all over the world.²⁹ There are four such groups in Hungary: the Science and Theology Centre in Debrecen³⁰, the 3Cultures Group³¹,

²⁶ Their number is 48.

²⁷ The remaining one group, the Unification Church, considered its stance completely different, therefore, we omitted it from the analysis.

²⁸ These five are the following: Ananda Marga, Voice of Silence Church, Scientology, Sodalitas Mithraica, and the Local Community of Szolnok. Most people would, however, consider the last one a Christian Community.

²⁹ http://www.metanexus.net/local_societies/default.html

³⁰ <http://www.drk.hu/th-e.htm>

³¹ <http://www.3kultura.hu>

the Jesenius Centre for Science and Religion³² and the Interdepartmental Forum on Religion in Central European University. Also there are more and more scientific conferences held about this topic in Hungary. The latest examples are: in November, 2004 the Department of Astronomy of Eötvös University organised a conference in Dobogókő³³, in the spring of 2005 the Hungarian Pax Romana – a Catholic association - held its 47th annual conference. The central topic of this meeting was the encyclical, “Fides et Ratio” by Pope John Paul II.³⁴

In a more general sense, we can do nothing but repeat some of the most obvious yet neglected facts. Popular works in the Hungarian language and a more intensive media presence would also very important to for the public. A deficit of authentic information is a characteristic of the current situation and a misinformed public easily reaches fast judgements that compromises truth. Finally it is also a very important mission to facililate acquaintance in self and others with the history of the relationship of the natural sciences and religions and also with the peculiarities of the current situation.

³² <http://www.jesenius.hu>

³³ <http://astro.elte.hu/astro/hun/esemenyek/konferencia/manreza2004.html>

³⁴ <http://www.communio.hu/pax-romana/>