

Creation - Evolution - Evolutionism

Lutz Sperling

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1. Fundamentals

In recent time, the term **creation** has received a lot of attention. However, let us not be fooled by this term, which is often used to imply a 'self-organization' of matter, or even a self-created world. In this presentation the term 'creation' shall be understood in the sense of the Judeo-Christian belief. The first sentence of the Bible states: "In the beginning God created the heavens and the earth"(Gen 1.1). The Catechism of the Catholic church clearly emphasizes what determines the mystery of creation from the perspective of our belief: God creates in wisdom and love; God creates „from nothing“; God creates an orderly and good world; God is simultaneously above creation and present in it; God maintains and sustains creation constantly.

Besides His revelation through the prophets and through His Son, God has also revealed himself through His creation. In humble acknowledgement of the Creator, incredibly beautiful and humane natural sciences could have developed through the „reading of the book of nature“. But indeed we find the endeavor for the understanding of nature in many cases in connection with the striving to dispose of God as Creator, while hubristically attempting to become godlike so as to see through and rule the world.

The idea of change and development in the biological species can be traced back very far and was not initially seen in contradiction to Christian belief. Initially, it was referred to as **descendant theory**, in the sense of a doctrine on ancestry. Today, the term **evolution** has generally been accepted instead. The term was at first used in biology to refer to the evolution of the individual (or ontogeny), e.g. from the fertilized egg to the development of the embryo through to the full-grown animal or human. Nowadays, this term predominantly brings to mind the development of phylum (or phylogenie). With regard to ontogeny, we now know that it is effected through genetic programming, in other words, that it is pre-programmed. Analogically, we may also refer to the evolution of a technical product, for example, the bicycle. Here, a product naturally does not develop of its own volition from its progenitor; instead, the constructing and optimizing human stands in the background, determining the desired characteristics. This is similarly true of heuristic optimizing processes (e.g., with the aim of an optimally stable design of a structural part), which are referred to as evolutionary strategies, or more generally as evolutionary algorithms. Here, one imitates the suspected or identified processes of nature; but again the goals are

always determined by humans. In a reference book (Brockhaus, volume 1998) one finds under the keyword evolution: „change and development...toward a precast aim“.

As to whether this also holds true for evolution in the sense of the development of phylum, we have already arrived at the most important question of this presentation: Precisely all notions of a precast aim are vehemently denied and battled by Neodarwinists. Moreover, evolution has become a paradigm, a universal model that is to comprehensively explain the world. Because of this claim, the term evolution inevitably had to be expanded, so that one not only talks of biological, but also astronomical, prebiotic, or chemical evolution in the sense of the precondition and first step to the development of life. Importantly, biological evolution is overextended especially with regard to humans, which is evidenced in the development theories of a cultural, spiritual, religious evolution, a sociobiology, an evolutionary awareness theory, an evolutionary psychology, etc.

In the face of this universal claim of the evolutionary model one speaks of **evolutionism**. Nowadays, this ideology predominantly takes the place which was formerly held by Christian belief. According to Hans-Eduard Hengstenberg, evolutionism begins „there, where a conditional correlation between earlier and later forms is reinterpreted into a causal correlation; as if...being higher equaled lower plus a change of condition of the lower“. This evolutionism was also represented in spiritual form. However, in this presentation evolutionism is of special interest to us in the form of a materialistic monism as discussed by Haeckel .

2. The claim of evolutionism

The claim of this evolutionism is partly shaped by an undampened exorbitance; thus, we as Christians can not remain indifferent. As an example one may refer to a quote by Richard Dawkins, one of the most famous Neo-Darwinists of our time and a professor of the „Public Understanding of Science“ at Oxford. He has received many awards for his ingenious public representations of Darwinism, among them the 1990 Award of the Michael Faraday Royal Society for being „the scientist that has accomplished most in promoting the public understanding of science“. In 1997, he wrote in the magazine „the Humanist“: „Faith is one of the great evils of the world, comparable to the smallpox virus, but harder to exterminate.“

Sir Julian Huxley had already expressed the claim of evolutionism very clearly in his 1959 speech commemorating the centenary of Darwin's „Origin of Species“ during which he stated: „There is no longer any need or room for the supernatural in evolutionary thought. The earth was not created, it has developed through evolution...thus, all plants and animals on this earth are also products of evolution – as are we, spirit, reason and soul, brain and body. Also religion has developed through evolution...The evolutionary human can no longer find any refuge in the arms of a self-invented, apotheosized father figure.“

The missionary fervour of atheist Neo-Darwinists is clearly recognizable when one pokes around on the websites www.giordano-bruno.stiftung.de or www.evolutionsbiologen.de. For instance, on the homepage of the Giordano-Bruno-Stiftung one promptly encounters these sentences: „We live in a time of a-synchronicity: While we stand in the 21st century technologically, the majority of our world view is still shaped by legends that are thousands of years old. This combination of the highest technical know-how and the most naive kind of childhood belief could have fatal consequences for our species in the long run. We behave like five-year olds who have been assigned the responsibility for a jumbojet.“ This is certainly aimed against the Christian world view. One could endlessly continue the list of such quotes.

3. The success story of Neo-Darwinism

Darwinism experienced one of the most impressive success stories of intellectual history of the last 150 years, which cannot be traced in detail here. In the year 1859, the British naturalist Charles Darwin published his epoch-making work „The Origin of Species by Means of Natural Selection“. It fit well into the intellectual climate of that time and was enormously successful. In suggesting that plant and animal species are a result of coincidental changes and selection, that is, selection and survival of the fittest, he claimed to have found a mechanism to explain the diversity of life. God as creator seemed to have become superfluous. A.R. Wallace published a similar theory about the effect of selection around the same time as Darwin, but explicitly excluded humans. Darwin, after some initial hesitation, later included humans in his theory, although he was still unsure about the transference of genetic characteristics.

With the rediscovery of Mendelian hereditary laws at the beginning of the 20th century, Darwinism entered a crisis. One had to conclude that the heredity of acquired characteristics, so-called indirect inheritance, was not possible. Thus, the enduring changes in genotype necessary for evolution could only have developed through mutations i.e., saltatory changes in genetic material. During the 20s and 30s of the 20th century, the integration of the selectionist and mutating view produced a 'synthesis theory', which raises the claim of uncovering the causal reasons for evolution. Today, the theories that are propagated generally use the term 'Neo-Darwinism', which refers to Darwin's theory of evolution without recourse to any kind of indirect heredity as well as a connection between Darwinism and genetics.

Another factor that was relevant for the success of Neo-Darwinism was a convergence of the representatives of a great variety of sub-fields, including paleontology, which researches fossil finds, taxonomy, which develops classification systems for living beings, genetics, i.e., the study of heredity, as well as natural sciences, all of which had spoken different languages until that point. Interestingly, Darwinism had at first very little success especially among paleontologists. By then, one had come to agree that evolution occurred gradually through genetic mutations, recombinations during fertilization, and natural selection. In addition, Neo-Darwinism gained special powers of persuasion through the population concept, which regards species as reproductively isolated groups of population, as well as through sexual selection, which we indeed encounter on television on a daily basis. There were additional evolutionary factors that were denoted, which we cannot go into in the current presentation. Meanwhile, an immense amount of research has been conducted with the aim of further extending the theory, and, in particular, rejecting fundamental criticism. For this purpose, a series of additional explanatory efforts were introduced, such as pre-adaptation, additive typogenesis, and the concept of the double-function of organs; however, there is little empirical support for these models and they can be more generally characterized as conceptual paradigms. In this way, Neo-Darwinism has succeeded in dominating established sciences and schools without almost any competition.

There is an inherent tendency in science of attempting to solve new problems and answer new questions with hitherto successful methods. This is how the afore-mentioned expansion of evolutionary theories led to evolutionism; with the consequence, for example, that a typical high school textbook entitled „Evolution“ also deals with questions of so-called chemical evolution, the genesis of life, as well as the spiritual and cultural evolution of humankind.

4. Criticism of Darwinism

I am neither biologist nor theologian. However, we are forced to take a position on these questions, because they also profoundly influence religious life and ethical behaviour of man. Consequently, while I do not allow myself to pass judgment on field-specific questions, I nevertheless try to make up my own mind through eclectic readings and do not let ideologists pull the wool over my eyes.

In my opinion, there are a series of claims of evolutionary theories that one should indisputably adopt. Among these are, for example, the fact of an evolutionary development itself, the lack of competition of long-term models, the relatedness of different species by phylogeny and the biological origin of humans from the animal kingdom. However, even on these grounds there is massive criticism of Darwinism; and only this criticism shall be the focus of the current chapter. In fact, even the indisputable claims listed above are often cast into doubt by Christian-faith motives. Interestingly, while atheist evolutionists often react militantly to this criticism, they offer inadequate answers to the more profound philosophical objections.

There is a wealth of literature critical of Darwinism with an overwhelming number of arguments; and it is an intellectual pleasure to read how Neo-Darwinists are evidenced to have committed errors in reasoning, contradictions, circular thinking and other similar behaviours. That is why I urgently recommend that all those whose faith is being threatened by evolutionism to engage this literature, even if it is not homogenous and sometimes includes exaggerations and inaccuracies.

The following list includes examples of such literature:

-Wolfgang Kuhn: *Stolpersteine des Darwinismus/ Ende eines Jahrhundertirrtums*, Christiana-Verlag, 1999.

-Reinhard Junker, Siegfried Scherer: *Evolution/ Ein kritisches Lehrbuch*, Weyel Lehrmittelverlag Gießen, 5. Auflage, 2001.

-John Lennox: *Hat die Wissenschaft Gott begraben?/ Eine kritische Analyse moderner Denkvoraussetzungen*, R. Brockhaus Verlag Wuppertal, 2002.

The 'Institut für Glaube und Wissenschaft' (Institute of Faith and Science) in Marburg has a very resourceful webpage www.iguw.de. It includes, for example, the following recommendable texts that critically oppose evolutionism:

-Reinhard Löw: *Evolutionismus in naturphilosophischer Kritik*

-Peter Rüst: *Spezielle und allgemeine Evolutionstheorie/ Fakten und Spekulation*

-John C. Lennox: *Grundfragen des öffentlichen Verständnisses von Evolution und Schöpfung*

If one is to pursue the question, to what extent the theory of evolution is proven by scientific research, a division into three parts is recommendable: the *emergence of life* from the inorganic; so-called *microevolution* within predetermined organizational characteristics or with quantitative changes of already existing organs, structures, or structural plans; and finally, so-called *macroevolution*, which refers to the development of not yet existing structures and, respectively, structural plans, organs, and qualitatively new genetic materials and suchlike.

Microevolution concerns observable phenomena and remains open to gaining new insights through experience. Included are processes of adaptation and optimization of living beings, on which their impressive ability to adapt to living conditions vitally depend and on which the effect of Darwinian mechanisms can be verified. Microevolution is thus the least controversial of the three areas named. According to John Lennox, the exact boundaries of microevolution are a fascinating scientific question. Accordingly, Junker and Scherer have introduced the so-called species-encroaching prototype. In my opinion, there is nothing that speaks against, for example, classifying the origin of sea mammals from land-living ancestors under this model.

5. Stumbling blocks of Darwinism

Until today, the explanation for the development of life from the anorganic remains exceedingly speculative. In 1953, Stanley Miller, much jubilated, succeeded in creating the same organic substances as those elements of living beings from an artificial 'primordial soup' in his laboratory. However, despite enormous efforts, progress has not moved much further than this until today. Bruno Vollmert, former leading director of the Federal Institute for Materials Testing and director of the Polymer Institute of the University of Karlsruhe, was able to demonstrate that it was absolutely impossible for macromolecules (chain molecules), which are the carriers of genetic material, to develop in this manner (as explained at length in his book „Das Molekül und das Leben“, {Life and the molecule}, Rowohlt Verlag 1985).

The Nobel laureate Manfred Eigen was later able to develop a mathematical model of the 'hypercycle for replication' (or multiplication) of molecules in the form they are needed for the storage of genetic information. However, this could not be replicated experimentally. Furthermore, these molecules must first of all be existent. Moreover, one has to emphasize that selection at the emergence of life could not yet have had a function and thus even the Darwinist Dobzhansky conceded that „pre-biological natural selection is a contradiction in itself“. In addition, the efforts to explain the development of the intricately-built cell membrane are also completely unsatisfactory. In 1863, the famous French researcher Louis Pasteur was able to prove that micro-organisms do not develop spontaneously, but that creatures develop only from creatures, *omne vivum ex vivo*. Until then, scientists had predominantly believed in a so-called abiogenesis. Surprisingly, it is precisely after this conclusion that we are told one knew how life originated of its own volition. It is worth noting that the evidence for Darwinism in macroevolution that is cited in media and textbooks originates mainly from the area of microevolution and is, then, in great part unsubstantiated, also claimed for macroevolution.

As matters stand today, massive doubts are raised regarding the conventional explanation for macroevolution, which concerns claims about non-replicable past events. Of all the formidable and incalculable wonderful facts of the living world, it is so far only a very small subset that Darwinists believe to be able to explain. And even among these, there is often counterevidence that invalidates the entire argument! Sometimes this invalidation is possible with childishly easy questions that are reminiscent of the fairytale about the emperor's new clothes. I would like to illustrate this with a few examples:

For instance, Wolfgang Kuhn cites the electric motor of the colibacterium as an example of an organ with so-called „irreducible complexity“. We are talking about a true marvel with electric propeller, with a degree of efficiency of nearly 1, with a speed of up to 15000 revolutions of the powering flagellum per minute, with proper bearings, with the diameter of the motor at only a thirty millionth of a millimeter. In Neodarwinism, the concept of 'gradualism' demands an evolution without any leaps that follows a progression of miniscule steps. It is thus virtually unimaginable how precursors are to have existed and have been passed down over a long period of time without constituting ballast as unusable structures, which would have led to extinction in the fight for survival. Especially striking is the impossibility of the inheritance of complex reproduction methods, which often included other creatures, in the incomplete, not yet functional state.

In light of the continually growing abundance of paleontological findings, Neodarwinists claim that the problem of the so-called „missing links“ no longer exists. However, within our classification almost all of the alleged evidence would fall under microevolution. There are practically unanswerable problems concerning the prime example of the 'primordial bird' Archaeopteryx, which is presented to every child in school as proof of the evolution of birds from reptiles. For instance, this creature already had highly-intricately built, complete feathers. Nothing is known of intermediate forms between reptile scales and bird feathers. Additional questions of the child in the named fairytale are: How did the reptiles gradually evolve from cold-blooded to warm-blooded animals, an indispensable prerequisite for the

flying of birds? How did the alveolus lungs of reptiles gradually evolve into the syrinx lung of birds? Wolfgang Kuhn justifiably claimed that „not a *single* real intermediate form between species has yet been discovered“. Furthermore, until today, causal evolutionary research could also not explain the coincidental evolution of any organ, such as the eye, for example. Neodarwinists have called upon the concept of double-function to suggest that feathers initially developed for thermal protection and were only later used for flying. However, feathers would be detrimentally complicated for this, and the child in the fairytale asks why the 'feathers' of Kiwis, birds that do not fly, have taken on the form of hair. Concepts such as these are largely speculative and primarily serve as a defence for Darwinian explanation attempts.

It seems obvious that locusts who look confusably like leaves are better protected than others, so that they developed like this through selection. The child asks: Why then are they so perfectly similar to leaves that they devour each other, and why are other existing locusts that do not look like leaves even more successful? Finally, the example of beauty. It makes sense to everyone that the wonderful colours in the wheel of the peacock can be explained evolutionarily by his sexual advantages. The child asks, why did a completely white albino peacock discovered in Switzerland have no disadvantages whatsoever with hens; and why is there similar wonderfully rich colouring in other demonstrably colour-blind animals? Why does the nightingale sing so marvellously, while the sparrow is obviously more successful in the fight for survival with his chirping? Howsoever such questions are answered in detail: in the end, the cogitation of and meditation on the inexhaustible, wondrous world of creatures in detail is for many people, among them prominent researchers, a cause for questioning whether Neodarwinian mechanisms alone had the ability to create this wondrous world.

Sometimes Darwinists have let themselves be carried away into admitting their real motives. For instance, in the 19th century, the Swiss botanist Karl von Neageli confessed: „To deny primordial creation is to proclaim the miracle!“ The anatomist and anthropologist Arthur Keith wrote in the first half of the 20th century: „Evolution is unproven and unprovable. We **believe** in it merely because the only alternative is God's act of creation – and that is unthinkable“.

Maybe the militant position of some Neodarwinists could be diffused somewhat, if we Christians make it clear to them that: also we do not regard this wonder naively, and offer to jointly admire the miraculousness while trying to understand it. Should not hypotheses about, e.g., 'saltationism', the sudden development of new species or greater differences, be admitted for competition to a greater degree, even if they are difficult to explain with hitherto existing Darwinian mechanisms? Also in support of this would be the 'Precambrian Explosion', where a wealth of basic forms appeared almost instantly in a geologically short time.

Finally, one may point out that criticism of Darwinism does not only come from the Christian side. For example, not surprisingly this also counts for Islamic voices. But I also have in mind the philosophically profound, Darwinian-critical book „Ursprung und Werden der Welt“ (Origin and Becoming of the World) by Eckhard Böcher, the head physician of an anthroposophical clinic; however, it is not acceptable from a Christian standpoint.

6. Theology and coincidence

In the following chapter, several basic objections against Neodarwinism shall be discussed. To begin with, a word about the classic distinction between effect and goal-causation is expedient. According to Plato, the scientific answer to the question why Socrates does not escape from prison is: because his bones and sinews are not moving out the door. Thus, this refers to an effect-causation, in latin 'causa efficiens'. The answer of Socrates is: „because I do not want to“. This is a goal-causation or final

causation, in latin, 'causa finalis'. The tenet of goal-causation is teleology. One involuntarily suspects a will behind goal-causation, ultimately a person. Whoever focuses unselfconsciously on the wonderful expedience of creatures and the purposefulness of evolution, can hardly fend off the impression of teleology, a goal, a final cause. During all ages, the wonders of life have led people to humble faith in the Creator and to sing His praise. The militant atheist Richard Dawkins had to admit that: „Living objects...appear to be designed, they raise the overwhelming impression as if they were planned.“

Until the middle of the 19th century, biologists frequently still spoke of the creation of living beings by God. However, with the generalization of the mechanistic world view, the naturalistic world view had gained a certain influence. Concerning the image of God, this led to deism. One still conceded that God created the world in the beginning; but one ruled out that he exerts continuous influence on the course of the world thereafter.

In contrast, Christian faith has a theistic image of God, according to which God continues to sustain and direct the world, exerts influence on history, and has spoken through the prophets and revealed himself through his Son. It was in these circumstances that Darwin proclaimed to have found a mechanism for the independent development of plants and animals. This had an effect like the famous spark in the powder keg. In the year 1859, Engels wrote to Marx: „this Darwin finally demolished teleology! That had not been accomplished until now!“ As a consequence, there was little further reference to God in the area of biology. In 1987, Richard Dawkins chose the following title for his famous book: „The blind watchmaker. Why the evidence of evolution reveals a universe without design“. This title refers to an argument that was raised against Darwinism much earlier that if one were to find a stone on the ground, one would ascribe it to coincidence; however, if one were to find a watch, then one would be convinced that it was the work of a watchmaker. Referring to this, Dawkins emphasized the supposed blindness of the Darwinian mechanisms.

From this I deduce the following conjecture: The displacement of faith by the evolutionary paradigm as ersatz religion is not primarily caused by the results of science. Rather, the already present loss of faith in divine providence inspired the development of evolutionism. That is how boundary-crossing, exorbitant, and presumptuous theses from the side of natural sciences and the loss of faith worked together, inseparably yoked, in creating evolutionism's claim of being capable of answering all questions.

Maybe the accusation of believing myths levelled against us Christians can even be ascribed to its originators. Indeed, the Judeo-Christian faith in a sovereign, ex nihilo, creating God had led to a revolutionary displacement of mythical polytheism in ancient times. Therefore, Lennox can justifiably ask: „Could it be that the subtle danger exists again today of some scientists and philosophers ascribing mythical creating powers to matter and energy which they do not possess?“ At times, Neodarwinists defend themselves against the allegation that they regard evolution as a result of pure coincidence. Nevertheless, coincidence plays critical role for all of them. For instance, in 2002, the recently deceased centenarian Ernst Mayr wrote: „Indeed, the result of an evolutionary process is generally the outcome of interactions of multitudinous coincidence factors. Blind coincidence also produces variation“. In 2003, Ulrich Kutschera stated: „Coincidence (creation of genetic variability) plays the primary role in the evolutionary event; thereafter, selection is the directive process.“ As a result, Neodarwinists go beyond the conventional methods of other natural sciences, that is, of physics and chemistry. The Neodarwinist Ernst Mayr describes it as: „One of the most fundamental differences between biology and the exact natural sciences is that theories in biology are based on concepts, while they are based on laws of nature in the physical sciences.“ According to him, evolutionary biology is „closer to the humanities than the natural sciences.“ However, in the same scholarly paper he states „apparently goal-oriented processes are no longer explained through occult theological powers, but they can now be explained in terms of scientifically accessible chemical-physical factors“.

This sentence contains two claims, which shall now be discussed in more detail. 1. Because of the

great difficulties in honouring their claim, Neodarwinists are constantly tempted to call upon the certitude of physical laws for their hypotheses. For example, a brain researcher of the University Magdeburg argued in a letter to the editor that the evolutionary principle was by now just as certain as the law of the lever in physics. In the February issue of National Geographic Germany, Richard Lewontin, a geneticist at Harvard University, and author David Quammen, draw a similar comparison to the certainty of the assertion that the Earth revolves around the sun. As a light ironic aside here, I cannot resist pointing out the excessive claim that is often ascribed to the Copernican system, as stated by the Nobel laureate in physics Max Born and confirmed by Max Planck with similar words: „Therefore, as seen from Einstein's perspective, Ptolemy and Copernicus are *equally* right. Which point of origin one chooses (that is the sun or the earth) is a matter of convenience.“ But the decisive difference in the case of evolution is that the movement of celestial bodies principally occurs in regular patterns and can be observed as well as predicted according to identified laws. In this connection, Gallileo had proclaimed that the book of nature was written in the language of mathematics and only those who possessed command over it could read in it. He thus hubristically explained a partial truth of the whole truth. With regard to evolution, Ernst Mayr explained in similar terms that it had become apparent „that the solution could not be found by a philosopher without a background in biology.“ According to the named book by Eckhard Boecher this means that, in the end, mathematicians, engineers, physicists, philosophers, theologians, among whom the opponents of Darwinism are mainly to be found, would have to accept the right world view from Darwinian biologists.

2. Ernst Mayr addresses the „occult teleological forces“ with strong words. He refers to teleology as one of the pivotal heterodoxys. Further he states: „ However, an explanation for the functioning of such a teleological principle could never be found, and the insights of genetics and palaeontology finally discredited teleology completely.“ In 1988, Will Provine wrote in an essay about evolution and the foundations of ethics: „Modern science immediately implies that the world is strictly organized according to mechanical principles. There are no goal-oriented principles in nature at all. There are no gods and no rationally ascertainable, designing or planning forces.“ The fact that Richard Dawkins was to have claimed that a tendency toward greater complexity could be derived from Darwinian mechanisms, hardly changes anything about the general denial of teleology. The claim that all traces of teleology have been removed from biology represents a challenge to the Christian faith that is to be taken seriously.

In my opinion, Mayr and Provine – and maybe this also holds true for other opponents of Darwinism- commit an error of category here. We can agree with him that probably no coercive evidence for a teleological principle can be produced with scientific methods. But this could not be any other way; because it concerns a philosophical category. In other words, natural science will never be able to determine definitively whether or not evolution results from a final cause. However, this says just as little about the existence of a final cause, as the fact that Soviet cosmonauts did not find God on their flights says anything about the existence of God. Likewise, one cannot prove by means of exploring all processes in the oven that there is no baker.

This corresponds to the Christian belief that God is never a cause among others within creation, but instead acts upon secondary causes as the sovereign creator. Even if we could witness the whole of evolution in fast motion, the real one, not the phantasies of materialist film makers, we would still not set eyes on God. God must not be brought into play as a makeshift for questions that are in principle accessible to science. Materialists falsely accuse the Christian faith of this; however, there are unfortunately also some Christians who give them cause to do so.

The materialist draws the following conclusions: He presupposes the truth of the materialist world view. Thus, all that exists must have developed on its own by means of self-organization. He is convinced that it is only a question of time until the gaps and contradictions of evolutionary theories are remedied. He tries to write off all contrary positions to the area of simple feelings. For instance, Peter Atkins, professor of chemistry at Oxford, wrote in 1992: „Humankind should accept that science has

eliminated the justification for faith in the meaning and purpose of the cosmos and that the survival of belief in a purpose is only due to emotions.“ In 1989, Richard Dawkins even made the following insinuation about religious belief: „...it rejoices in the independence of proof, which it proclaims from the rooftops.“ However, the church has always rejected such a position under the designation of fideism and emphasizes that *fides et ratio*, faith and reason, belong together. On this note, we will now again consider coincidence and the purposefulness of evolution more deeply.

Neodarwinists insist that genetic variability is the result of pure and blind coincidence. This claim has justifiably led opponents of Darwinism to apply the mathematical theory of probabilities to this assertion. In the process, they frequently came upon extremely low probabilities for processes claimed by Darwinists. In this manner, Bruno Vollmert proved the aforementioned impossibility of the formation of chain molecules in the hypothetical primordial soup. As a result, he concluded that the macro molecule DNA could not have developed on its own as carrier of genetic information; consequently, the reign of Neodarwinism today is untenable as a scientific hypothesis. The Swiss biochemist Peter Rüst made the following comment: „Thus, progressive evolution on the basis of natural selection of random mutations has been proven a myth, which is not supported by any facts for the time being, but instead has transastronomical improbabilities speaking against it.“ As a matter of principle, a certain amount of caution is advisable against viewing the results as absolute conclusions and generalizing them too widely.

The theory of probabilities is fundamentally not without conditions, but instead is always based on certain assumptions. Thus, every probability is a conditional probability. Moreover, we do not want to generalize Vollmert's results as indicating that chain molecules could never and nowhere evolve without the influence of mankind. Therefore, the final decision whether indeed, as the media announced in March of 2005, vitally important chain molecules can develop in the capillaries of oceanic ice, can be faced with calm and positive interest. Will it nevertheless be possible, despite the hitherto complete lack of success of all trials, to experimentally create the most primitive forms of life? The biologist Wolfgang Kuhn points out that, if it were to be possible, a whole lot of human intellect would have been invested. This in turn, is more so an argument for the creative spirit at the primeval origin of life than one to refute it.

Nevertheless, in my opinion, these calculations in their entirety have great persuasive powers; indeed, even the atheist Nobel laureate Jaques Monod interpreted all the steps of evolution up to the development of man as an absolutely improbable lottery win. Thus, John Lennox was able to astutely comment: „The conclusion of an intelligent planner and designer occurs by utilizing coincidence (in terms of remote probabilities), to exclude coincidence (in terms of lack of intention).“ In other words, the assumption of blind coincidence, that is, coincidence without intention, without the will of an intelligent initiator, is made absolutely unbelievable because of its exceedingly remote a priori probability.

Beginning with the hypothetical big bang, evolutionism holds an all-embracing claim of explanation; in light of this, it is important from a faith perspective to also refer to the scientifically proven, exceedingly extreme fine tuning of universal physical constants that are fundamental to the 'anthropic principle', which has prompted many physicists to great amazement. The most unbelievable example stems from the world-renowned mathematician Roger Penrose. According to his example, the Creator, in order to bring into being a universe with little entropy so that development would even be possible, would have to have needed a targeting precision of $1:x$; x being a ridiculous number. If a 1 were to be followed by as many zeros as elementary particles contained in the universe, then the number thus created would be even much smaller than x . Moreover, the concrete parameters for favourable life conditions on our planet Earth, which naturally also concern the entire solar system, are in turn subject to astoundingly fine tuning. Indeed, a change of only 1-2 % in the distance between the Earth and the sun alone would already be deadly. On this basis, the mathematician Hugh Ross estimated the probability for the existence of such an inhabitable planet in the entire unimaginably large universe; in other words, the a priori probability of the existence of our Earth

with the associated living conditions, at $1:10^{30}$. A reminder: this number means one million times one billion times one billion. Thus, the Earth should indeed not exist at all, unless it were an unbelievable lottery win. Here reason may ask, whether an intelligent planner and designer is responsible.

7. Information and divine Providence

A planner and designer is also frequently inferred because of the information stored in the genome. This genetic code, which represents the blueprint of a living being, has a dimension of its own altogether, beyond mass and energy. Until now, we know information exclusively as a dimension of intellectual origin. In principle, what matters is the sequence of the four different building blocks of DNA (deoxyribonucleic acid). One can compare them to letters that create meaningful words and thus represent certain pieces of information for the formation of proteins. The DNA of a coli bacterium contains approximately 4 million letters; the human genome, that is, the entirety of the DNA divided into genes of humans is 3 billion letters, which corresponds to the amount of information in a large library.

The information stored in this manner is very complex and very specific. The great complexity can be exemplified by comparing it to a regular pattern. Such a pattern has little complexity because it can be generated with a short computer program. The spontaneous development of patterns by means of self-organization as in chemistry and physics, has thus no explanatory value here whatsoever. However, there is apparently no such formation law that would lead to diminished complexity for the order of DNA building blocks. Instead, the great specificity of the information stored in DNA is connected to the meaning of the information. For example, a play by Shakespeare has great specification, whereas a row of letters hammered together on a typewriter by a monkey has a negligible one. Thus, the question was asked, how many monkeys and how many typewriters and how much time are necessary to create something as meaningful as a play by Shakespeare. Most likely, not even one single intelligent sentence would ever be generated. The question of the origin of the information stored in genes is a very strong argument against a creation caused by coincidence and selection. It is indeed so strong that Richard Dawkins had to take pains to come up with a refutation in his book „the Blind Watchmaker“. However, his attempts were debunked and can be likened to sneaking in an alpha monkey, who fixed the right letters in place when they so happened to coincidentally appear in the right position. Although the probability of evolution was drastically increased in this manner, it was at the cost of supplying intelligent information from the outside; the result must already be known somewhere in advance.

In connection with these questions, an international group of scientists represents the 'Intelligent Design Theory', also known as ID-Theory. Essentially, they claim that the origin of the information stored in genes is unknown and must have required an intelligent source. A great part of these scientists believe in God. However, they want to keep God out of science and instead justify their methods for proving an intelligent authorship by using the same entirely uncontested methods as other disciplines such as archeology, cryptography, computer science, and forensic medicine. The mathematician Lee Spetner stated that he was able to prove on the basis of modern computer science that information increase could not develop through mutation, but rather was merely lost instead. Indeed, even the existence of something akin to a 'conservation equation' for information has been conjectured. Finally, it is also empirically proven that although „positive“, or advantageous, mutations do occur, they always remain the exception in comparison to negative or neutral mutations.

Neodarwinists are irritated by the ID-theory. For example, Ulrich Kutschera argued as follows: „Thus, there is a consensus among experts that there is no fundamental difference between a follower of creationism and a promoter of the ID-Dogma, because the „designer“ is not further specified and could be identical, for example, with the God of the Bible.“ Essentially, Neodarwinists ascribe the growth of information to coincidence; because in order for Darwinian mechanisms to take hold, something must

first be present. To atheists, the origin of life as well as the emergence of information connected to it, must look like coincidence. With this we have again arrived at the notion of coincidence, a reason to once more think about this concept from the viewpoint of faith. Some are perhaps surprised how longstanding is the attempt to bring into play apparent coincidence against God's acting. In the Book of Wisdom, a text of the Old Testament originating in the penultimate century before Christ, the godless say: „But we were created by coincidence and later we shall be as if we had never been. The breath in our nose is but mist and thinking is but a spark at the beating of our heart.“

It occurred to me that evolutionary theories, viewed profoundly, have actually not presented any new challenges to faith. One could always bring into play the apparent coincidence against God's acting, as in e.g., the astronomical development of the sun, Earth and moon, which are essential prerequisites for life on Earth in this constellation. Or someone could ask, how could God have foreseen the incarnation of his Son since eternity, if the human forefathers of Jesus were subject to a coincidental ancestral line? And similarly: How could He have intended me? The question, why then were the majority of people nevertheless religious in the past?, led me to the old church doctrine of providence. Providence can be understood as a goal-oriented acting of God within creation, which is also tightly connected to the belief in God's constant and continuous acting in the world created by him. The current Cardinal professor Leo Scheffczyk poses the following question in his book *Introduction to Creationism*: „To what extent is self-action of creation as opposed to determinism and in particular, the freedom of intellectual creatures, preserved?“ He then states beautifully: „Thus, Providence is something that encompasses all created conditions, and does not steer and determine independent activity and will of free creatures from the outside, but instead creatively inspires and virtually attracts from within, so that the action sought by God is accomplished directly under invocation and exertion of all abilities invested in the creation.“ This mystical acting of God can only be humbly praised by us, but not pryingly scrutinized. The Christian faith appears to the 'world' as foolishness. However, as Christians we do not let ourselves be made to such fools who believe they can carry the water of the divine creative spirit with the sieve of scientific methods. True foolishness consists more likely in the claim that this water does not exist, because it cannot be found in this sieve.

We have discovered that very critical philosophical assumptions and presuppositions are introduced with every dimension of evolution. Therefore, the philosophical conclusions drawn from an evolutionary theory are also not a sole result of scientifically proven facts. Thus, it is legitimate to also evaluate a given evolutionary theory on the basis of its consequences for our idea of man and world view. This shall be demonstrated in a question that is fundamental to us humans; namely, whether coincidence not only played a substantial role on the road from evolution to humankind, but also whether the result of humankind itself is coincidental, so that it would have been a priori much more probable humans had not appeared at all.

While this explosive question is most often veiled with words such as 'evolution has created mankind' in popular science texts and films, forceful Neodarwinists largely agree on classifying humans as an exceedingly unlikely a priori product of coincidence. The often suggested idea that humankind would develop again if the same entirety of all conditions in the chronological order of geology were repeated, is purely not tenable from a scientific standpoint. We can demonstrate this with a thought experiment. Let us assume a divine abundance of power and elapse the whole creative and evolutionary process again and again, already with the correct fine-tuning of universal constants, but without aim in terms of divine providence. Under such a scenario, we would have to assume that a habitat such as our Earth would never exist again, nor would we ever have life, and least of all would we ever see intellectually able beings such as humans develop. Therefore, atheist Neodarwinists must thus live with the absurd world view that with the utmost probability, the world would never have come into existence. Whatever details science may still unearth with regard to these questions, it will always provide us with overwhelming reasons to be amazed. I regard this as a proof of God in the right sense of the word, that is,

as an important way to faith. This thought is related to the 'proof of contingency', which results from the amazement that anything exists at all rather than nothing.

8. Creationism

The term creationism is derived from the Latin word 'creare', to create. Therefore, one could describe anyone who believes in a personal God-creator as a creationist. However, the term does not readily reveal that there are various positions and gradations of this belief. So-called 'short-time creationism' or 'young-Earth creationism', assumes that the Earth has a young age of a few thousand years; in the extreme, this type of creationism takes the biblical creation stories and even the story of Noah as historical writings that are to be understood literally. Other varieties are shaped more scientifically and, for example, hypothesize catastrophes that date back only a few thousand years as well as the subsequent re-creation of species. While short-time creationists represent only a vanishing minority among Catholics, these positions have greatly spread, especially in evangelical groups (in particular in the USA) over the last few years, in defense against aggressive atheism. In return, this has additionally fueled the militancy of Neodarwinists. In particular, the term creationism is frequently used to indiscriminantly refer to all critics of Neodarwinism, in order to sweepingly denounce them as backward and hostile to science. Even on the internet encyclopedia Wikipedia, one can find the following sentences: „According to the view of many orientations of creationism, also the continued development of the universe requires the sustained intervention of this higher entity. Therewith creationism has set itself against the modern world view, according to which scientifically ascertainable processes are sufficient for the explanation of the world and the universe. Seen from an ideological perspective, creationists are normally theists.“ These sentences again make the above-mentioned error in categorization, and the reclamation of the term 'modern world view' for materialism implies that all believing Christians are backward. At times, the intimidation connected therewith produces alarming blossoms also within the Catholic church. For example, some years ago, the Catholic weekly 'The Lord's Day' revealingly rebuked a British creationist museum for „demonstrating especially to children that living beings are much too complex to be the result of coincidental mutation.“ On the first page where the article was listed, the creationism to be criticised was announced as „world creation by an almighty creator“. Here one can only hope that they know not what they do!

I regard short time creationism as completely unworthy of discussion. Nevertheless, one could describe the claim that it is scientifically refuted as unduly quick, as the following admittedly digressive questioning shall demonstrate: Could God not have created the Earth together with all geological layers and paleontological findings several thousand years ago? Technically, this would certainly be possible, but it pays dearly with a completely unacceptable picture of God, because in this case God would have purposely misled us humans. In addition, the immense intellectual beauty of the laws of the cosmos by which many scientists were and still are overwhelmed, would be destroyed by this, e.g., by fundamentally denying the radiometric dating process. Accordingly, I believe the main damage that short-time creationism causes is in the offering of the Biblical message to ridicule, against which Augustinus had already warned over 1500 years ago, and that people are driven toward atheism as a result of this.

However, one should protect short-time creationists from unjust criticism. I have been able to assure myself that they often connect their, in my opinion, rigid adherence to literal interpretations of the bible with a surprising wealth of knowledge and understanding of scientific facts. In connection to this, I would again like to address the well-known, commendable, and even award-winning schoolbook „Evolution. A critical textbook“ by Junker and Scherer. On the one hand, the Neodarwinist Martin Neuman acknowledged in a very critical review of the book that the authors „essentially described the

evolutionary concepts and research results in a factually competent manner.“ On the other hand, the Christian Swiss bio-chemist Peter Rüst, in my opinion, justifiably offers the following criticism: „Although theistic and long-time 'evolutionary theories' are briefly mentioned, they are evaluated much too superficially and are not differentiated. The book regards solely short-time creationism as a legitimate model of creation.“

Reproval of creationism is generally also aimed at the representatives of the above-mentioned ID-Theory, such as, Dr.Wolf-Ekkehard Lönig, the senior scientist of the Cologne Max-Planck-Institute for botanical research. His website www.weloening.de is certainly commendable for the great abundance of interesting material, such as for example, the substantiated challenge of concrete hypotheses put forward by Neodarwinists as well as a series of notable statements by Nobel prize laureates, which appear to justify doubts about the bold position of the named Neodarwinists.

One can also set the creation accounts of the Bible and evolution face to face without being a short-time creationist. As per example, I would like to refer to an interesting discussion contribution by the VBG-Institute of Peter Rüst and Armin Held entitled „the genesis account and evolution“. This institute can be found on the internet at www.vbginstitut.ch. Their purpose is to work on a current interpretation of the Biblical genesis account on the basis of present-day scientific insights. Those believing Christians who do not falsely read this text as a contribution to science, but rather as a kind of speculative religious meditation, will certainly benefit from it. Similarly, the Catholic philosopher and scientist Hugo Staudinger points out that the genesis account of plants and animals says: „the Earth bring forth“, on the other hand, of people it says, „let us create man“. This corresponds to our belief that the creation of spiritually endowed humans is more directly and personally connected to God's action.

9. Man and his spiritual impulse – no faith without theology

Evolutionism fully incorporates man; indeed inclusive of his intellect, his language and culture, his science, ethics and religion. At the same time, Christian faith also fundamentally concerns itself with man, and he stands at the centre of pastoral care. The church doctrine of creation, which is based on the Bible, is also very considerably influenced by its relationship to man. Therefore, connections and controversies are virtually inevitable in this area.

While the church has always endeavoured not to patronize the specialized sciences in any way and accordingly, there is not a single dogma that touches on science, it can nevertheless not remain silent in matters of man. Thus, the highly important question is raised, which positions regarding evolution are indispensable to faith. From the perspective of faith, all other questions should be equanimously left to specialists, whereupon lay people's inquiries and doubts are naturally always legitimate. However, theology and church may certainly react when specialists cross the line into philosophy and religion, and in my opinion they indeed must react.

Accordingly, the highest representatives of the Catholic church have also spoken out on these questions. On October 22nd 1996, Pope John Paul II addressed the members of the papal academy of sciences on the occasion of their plenum with the message „Christian idea of man and modern evolutionary theories“. Although such announcements do not require commitment in principle, they should be considered seriously by Catholic Christians. In his message, the late Pope first recalls the 1950 encyclical *Humani generis* by his predecessor Pius XII. in which this one described „the theory of evolutionism“ as a „hypothesis to be taken seriously“, and moreover stressed that „new findings gave reason to view the evolutionary theory as more than just a hypothesis.“ An unintentional and uncontrolled agreement among scientific findings in itself represented a significant argument in favour of these theories. He then emphasized that the human person has a spiritual impulse, which was directly created by God, while the human body has its origin in living matter existing prior to him. Finally, he

concludes: „Consequently, evolutionary theories that are not reconcilable with the truth about man are those that, guided by the inherent world view, regard the spirit as manifestation of the forces of living matter or a mere epiphenomenon of this matter. Incidentally, these theories are not capable of explaining the personal grace of man.“ The manifold reactions to this message are very significant. On the one hand, there were Catholic Christians, who anxiously asked whether the Pope had relented and accepted all other theories of evolutionism; in particular, whether he had avowed the attribution of pre-human evolution to pure coincidence, which according to Leo Scheffczyk „is hardly capable of a concession from a theological creation perspective.“ This prompted professor Andreas Laun, the well-known auxiliary Bishop of Salzburg, to compose a commentary worth reading entitled „The development of species – and man“ in 10 points. It also includes the following important sentence: „The belief that this or any other Pope could ever relinquish a fundamental position of faith, betrays a considerable degree of incomprehension on behalf of the Catholic church!“ Both texts can be found at <http://stjosef.at/dokumente/evolutio.htm>.

On the other hand, comments by atheistic Neodarwinists reveal the same kind of incomprehension. For instance, the notorious neuroscientist Wolf Singer remarked caluminously that the Catholic church admitted evolution only a few years ago, but with regard to man still insisted on God's intervention. In the National Geographic Germany 2004 November issue, the author David Quammen makes an entirely different claim by stating: „37% of Americans surveyed can live with the belief that divine initiative was the origin of all being and that evolution has been acting since that time – an opinion that the head of the Catholic church, the conservative Pope John Paul II, officially affirmed in October 1996.“ This would mean that the Pope had turned into a deist and heretic. Naturally this is a downright untruth, which is either spread because of ignorance or with the aim to dissuade Christians from their faith. Finally, the Viennese professor Franz Wuketits made this exceedingly nasty comment: „Also the official (Catholic) church has recently become a little hard-pushed. At any rate, it cannot ignore the theory of evolution. Thus, one is bound to act conciliatorily.“ With regard to the Pope's message he continues that it „may be meant well, but upon closer examination, evolution and creation prove to be irreconcilable and it does not make sense to try and reconcile evolutionary theory and creationism.“

I perceive the Pope's message as a prudent exposure of the indispensable minimum for faith, while avoiding all that could raise suspicion of an intrusion into science in terms of the 'Galilei trauma'. Naturally, believing philosophers and theologians must also take a stand with regard to other questions raised. We believe that God is engaged in a creative act especially during the development of all that is fundamentally new. Otherwise, the danger would exist that the belief in the creation of every single human spirit would appear like a foreign element in the overall picture. This danger is intensified by the idea of man that is propagated in various forms today. In relation to this, two valuable dissertations were produced in recent years by Vincent Berning, professor emeritus of philosophy at RWTH Aachen, on an anthropology grounded in 'critical realism', which is especially indebted to the great church father Thomas Aquinas. One of these dissertations also appeared as book by Andreas Josef Krafczyk and the other is entitled „Man and 'artificial intelligence'“ by Rolf Erassme, who also studied computer science. In the latter work, it is clearly illustrated that biologism, which is the focus of today's presentation, is not the only variety of a materialist idea of man, but that other ideas of man connected to 'artificial intelligence' are propagated, which in part contradict each other. The author demonstrates, how the terms intelligence and mind, will, consciousness and self-awareness, feelings and life may be understood in four different materialist basic notions. Today more than ever, it is essential to provide answers to the question „Who is man?“. This question is also the title of a book by Hugo Staudinger and Johannes Schlüter, which was published as a result of a major project at the Institut für Bildung und Wissen in 1981.

In this presentation, we can only briefly comment on the nature of man with a beautiful quote by the Catholic philosopher Dietrich von Hildebrand: „However, a comparison between the limited kind of

consciousness that one can observe in animals and the manifold dimensions of personal consciousness, immediately demonstrates to us how wrong it is to regard this difference as a mere increase of self-awareness. Personal consciousness manifests itself in cognizance - the luminous awareness *of* an object that opens up to us within awareness, with the ability to adapt our mind to the nature of the object (*adaequatio intellectus et rei*); in an understanding of the nature of the matter. Personal consciousness likewise reveals itself in the act of inference, in the ability to ask questions, to search for truth; and last but not least, in the ability to build an I-you communion with another person. All of this includes a completely new kind of consciousness, an altogether new dimension of being.“ Hildebrand also refers of the „miracle of the human spirit.“

The minimal requirement for the compatibility of evolutionary theories and faith named by Pope John Paul II conclusively implies a second requisite, which was described especially clearly in a talk by Timothy Lenoir: „A life science which on *principle* rejects purposeful organization as an explication model is irreconcilable with Christianity, because teleology is a minimal requirement of Providence in nature commensurate with a substantial component of Christian faith.“ Accordingly, the current Cardinal professor Leo Scheffczyk stated: „The realization of finality and reflection is an indispensable means for the reasoned theological connection between evolution and creation.“ The current Viennese Cardinal Christoph Schönborn said: „The inescapable question of why evolution should simulate purpose, demonstrates that the question of teleology is inevitable even where it is repudiated.“ All three quotes are taken from the book „Evolutionism and Christianity“ on the 1985 symposium „Christian faith and evolutionary theory“, which in my opinion ranks among the most pertinent documents from a Catholic point of view. With indispensable finality we have arrived at the core of the argument between Christendom and evolutionism. The remaining argument that faith and church would always lag behind science and would experience ever more difficulties, is true only insofar the acceptance of scientific findings by the church naturally cannot occur before such findings are existent.

10. Adam and Eve – constancy of species – truce – man, the animal

One of the most difficult questions, is the question of the path by which man arose from the animal kingdom. By means of the manifold computer animations on T.V., present-day man is seduced into the belief that he knows this path. In reality, he is surrounded by a profound mystery. This is typical of many frontiers. A similar mystery surrounds the co-action of mind and brain, which yet happens right here and now in front of our eyes and ears. Also, atheist brain researchers must admit that they cannot explain it, albeit they promise – or threaten- to put forward this explanation in the future. In connection to the path of man out of the animal kingdom, the question is frequently posed, although it is often smiled at, whether indeed all of us are descendent from the human couple Adam and Eve. Nobody can really answer this question. In genetics, the substantiated hypotheses developed years ago that all humans today could be traced back by decent to a 'primordial mother', who was to have lived in Africa. This demonstrates that the named question at least is not scientifically nonsensical from the outset. However, it is theologically closely connected to Adam's primordial sin in polarity to the salvation through Jesus Christ. That is why the church until today, e.g., in the previously named encyclical *Humani generis* of Pius XII as well as many other documents, acts on the assumption of 'monogeneism' of a single original human couple. According to one of the greatest theologians of our time, the afore-mentioned Cardinal Leo Scheffczyk who stands in complete unison with the teachings of the church, the truth of salvation could also be brought into agreement with the assumption of an ur-population or a single first human group, also called polygenism.

However, this question is also connected to the explosive and very current question of the unity of all humankind, without which race discrimination cannot be dismissed. We believe that there are only

humans and non-humans, and no half- or sub-humans. I am appealing to well-meaning non-Christian people, not to regard this important question solely as a problem of backward Christians who are unwilling to learn. Even Charles Darwin himself had already moved some human races into the vicinity of gorillas and predicted that the civilized human races would expunge and replace the allegedly primitive ones. The widespread textbook „Evolution“ by Peter Hoff, Wolfgang Miriam and Andreas Paul, although fortunately containing a sharp condemnation of race delusion, in essence cannot offer anything to oppose it but for the claim that „an unprejudiced treatment of the 'race question' has never existed at any time nor in any country of the world.“ One can only answer them that Christian faith justifies the dignity of man better than any impartial or not impartial 'treatment of the race question'.

The introductory chapter of the named textbook already contains six claims aimed against the erstwhile church, most of which are easily refutable. Three of them concern the question of the constancy of species, which is very explosive especially with regard to humans, while the church is accused of dogmatic adherence thereof. The undifferentiated reference to this question reveals the authors' ignorance concerning the great European philosophical tradition, according to which, as Reinhard Löw stated, the constancy of species is to be understood as „its preexistent and eternal constancy in God“, which is not antithetical to the evolutionary development of the truly new. This question affects the equal dignity of all humans, and the notion of continuing evolutionary change of man opens doors to all kinds of genetic manipulations. Finally, with regard to all observable changes of plants and animals in nature, one should also consider the likewise empirically provable finding by Niles Eldredge: „Species seem to naturally preserve an imperturbable, acrimonious resistance toward change – often over a time period of several millions of years.“

An opinion that is particularly widespread in church communities is that one should keep a truce by practicing a type of jobsharing in general, and emphasizing this especially in schools; this includes relinquishing all questions of 'how' to the evolutionary theory, while leaving statements about the 'so that' of creation to faith and religious instruction. After the many aggressive quotes by evolutionists cited so far, this truce should be called into question. For example, it should be cause for concern that Ernst Mayr reclaims the question 'why' as the question posed most often in evolutionary biology, and as mentioned above, Franz Wuketits flatly rejects a reconciliation. Christoph Schönborn asks: „Is science not over- and theology under-extended in this harmonious model?“ And he stresses that „necessary and perhaps salubrious arguments must not be suppressed.“ The most devastating variation of the named truce is the not infrequent practice of limiting faith and religious instruction to psychological and sociological questions emphasizing emotion, while leaving questions of knowledge to other academic subjects.

It was demonstrated that the main problem of Neodarwinism, the evident final purposefulness of evolution, is to be essentially disposed of by attributing it to pure coincidence. A different, especially perverse way of disposal of this problem is the plain denial of evolution of higher forms. I am referring to the show „Tierisch-menschlich“ (beastly-human) of the series „delta“ by chanel 3sat, which was aired on April 1st 2004 and moderated by Gert Schobel. After the ironic comment that „we are naturally the pinnacle of evolution“, Volker Sommer, professor of evolutionary anthropology in London, stated with full clarity that „this is in fact exactly what evolutionary theory is not.“ Günter Dux, a sociologist and philosopher from Freiburg, confirms: „Pinnacle in terms of valency“, and he reasons as follows: „Then one can see that there are indeed lines of development. However, there is not the least sense in assigning them with any kind of values, no matter how valuable our capabilities may be.“ Sommer agrees: „In that case we would truly be egalitarian philosophers.“ He talks of „humans and other animals“, and with regard to the certainly sad endangerment of chimpanzee species he uses the term „genocide“, thus equating it to the mass-murder of peoples. The afore-mentioned Viennese zoologist, paleontologist, and philosopher Franz Wuketits also rejects any kind of exceptional position or exceptional nature of humans. To him, every species of animal is nothing but a „different possibility of solving a problem“ and now the only question that remains is who's problems are actually being solved. To his question „If a dog,

a housefly, and an anteater now entered this room, then we would have three different kinds of worlds, and the question is, who now is right?“ one can only respond ironically: „the housefly“. One must then also wonder about the following comment by Professor Sommer: „Also humans and chimpanzees could probably produce offspring together. Maybe that has already occurred here and there, but that is a lesser difference than the one now between donkey and horse.“

11. Evolutionism at school

Certain efforts by creationist groups to combat evolutionism at schools -especially in the U.S., but also in e.g., Italy -, are massively branded as mediaeval and dangerous by the 'stop the thief' method. Meanwhile, these evolutionist ideologies are propagated at our schools with might and strategic mastership. When youth indicate in surveys in great numbers that they loose their faith especially in biology classes, then it is completely misguided to simply search for the cause in scientific facts. For example, Franz Wuketits wrote in a journal of biology at grammar school 'Praxis der Naturwissenschaft (Practice of Science)': „The brain created its gods, not the other way around; thus, this brain can also get rid of the gods again.“ In another passage he postulates: „Instead of the transmission of 'religious truths', it should be demonstrated in schools what the sciences know about religions, their origins, and their social, psychological, and biological roots“, and according to his opinion, they should thereafter deal with the subject of „how humans can also give their life meaning without religious belief or 'meaningful evolution'“. In an analysis of the afore-mentioned schoolbook 'Evolution', I have found these instructions confirmed. In addition to the already named decrivals of the church, the overall impression is created that the advanced Darwinian mechanisms are already essentially capable of adequately explaining evolution. Frequently, understanding is feigned by describing presumed temporal development in an eye-witness testimony style. This leads to especially dangerous extensions to culture and religion of man. Thus, the 'biological definition' of culture is favoured by the biologist John T. Bonner, whereby „culture, or as the case may be cultural capability, is *not* specifically human from the outset.“ This 'biological definition' was to also abrogate „the contrast between the terms 'nature' and 'culture' that is alleged by occidental philosophy“. For example, 'evolutionary awareness theory' is illustrated by the following statement: „Hence, the function of our sensory organs and our brain consists not of understanding the world, but of *being able to survive in it and successfully produce offspring*.“ If this is seriously to be sold as truth, then the conclusion of the Catholic philosopher Reinhard Löw is fitting here: „In the end, the truth of an evolutionary theory that is thought through consequentially, consists therein that there cannot be any truth at all, *including this one*. It is a singular gigantic paradox, whose core consists of the sentence: 'Now I am lying'.“ It is argued that the comandment „thou shalt not kill“ refers only to one's own group and thus has an evolutionary-biological origin in terms of kin selection and reciprocal altruism; according to this, the behaviour is eventually explainable as self-serving through the reciprocal action of the group. Is this explanation still valid for the calling to be found in the same book of Exodus a few pages later: „Also a stranger you are not to aggrieve“?

On the occassion of the afore-mentioned 1985 symposium „Christian faith and evolutionary theory“, Pope John Paul II. said: The „far-reaching claim“ of the evolutionary world view „no longer merely pertains to the development of man, but more all-embracingly to the reduction of all intellectual phenomena, including moral and religion, to the fundamental model of 'evolution', from which also their fuction and limits are circumscribed. Such a functionalization of Christian faith would have to strike and change it at its core. Therefore, thought that issues forth from Christian faith must concern itself with this evolutionary world view, which reaches far beyond its scientific foundation.“

12. Evolutionism and the Catholic church

Is this debate sufficiently engaged in face of the catastrophic situation in media and schools? Or in other words: Would not all to whom faith is important have to stand together in warding off evolutionary encroachments? And would not theological chairs and the Catholic academies be appropriate places for this debate? In fact, evolution and evolutionism do receive attention in these establishments. However, certain activities more likely lead one to conclude that evolutionism is rather encouraged here. As example I shall refer to the book „Darwin and God“, which reports on a symposium of the Stiftung für Theologie und Natur (Foundation for Theology and Nature) at the Bischöflichen Akademie Aachen in October 2002. Ulrich Lüke, professor for Catholic theology/systematic theology at the philosophical faculty of the RWTH Aachen, is the co-editor of this book. Pursuant to the invitation of the organizers, the seven contributors were to decide on one of three options. With regard to the option stating that religion and evolution are co-productive, to which reportedly all avowed themselves in essence, the question was asked „whether religion as result of cultural evolution possibly only represents the continuation of biotic evolution.“ And it continues: „According to this view, religion and along with it also the entire spectrum of human culture, would be phenomena contingent on nature and not achievements of man, nor created for him or because of him.“ In my opinion, maybe three authors could rightfully controvert this statement. However, one may classify four of the lectures as evolutionary-materialistic. Caspar Söling, a consultant to the Limburg Bishop Kamphaus, is one of the authors of a lecture on socio-biology, which plainly states: „In short: religiosity is a biological adaptation.“ I could not locate an actual dialogue in the readings that could still justify the lot. The conference proceedings of the Catholic Academy of the archdiocese Freiburg „Faith in the context of scientific reason“ communicate a similarly conflicting impression. In my estimation, at least six of the ten lectures are capable of raising doubts in important areas of our Christian faith.

A particularly sad example is to be found in the article „Beyond childish belief: God, the great flood and the cosmos“ by Johannes Röser, the chief editor of the oecumenical journal „Christ in der Gegenwart“ (Christ in the present). Among other things, the piece affirms and is in keeping with the overall message of the article by the leaders of the Vatican observatory and Jesuit George Coyne, which was cited with the following words: „For example, could God have predicted after one billion years of a universe that is fifteen billion years old that human life would develop?“ Later it says: „If we are to really accept the scientific point of view that alongside deterministic actions there are coincidental processes, for which the universe offers enormous opportunities, then it looks as if even God could not know the end result with certainty. God cannot know what cannot be known.“ Considering my presentation so far, one must say: If this is the true opinion of Coyne, then he has lost his Christian faith. And it is a public offence, when the chief editor of a journal that calls itself Christian, presents such positions as faith that has grown up, disqualifies traditional faith as childish faith, and in this connection, claims that the so-called figure of speech „Our Father“ no longer corresponded to our worldly wisdom.

Thus it is understandable that the great Catholic philosopher Hans-Eduard Hengstenberg said in 1985: „Evolutionism could not have had such devastating effects, if believable creationism would have been alive in theology and the church and the philosophical education of theologues would not have been so deficient over the past decades. There is a lot to be made up for, if the church is still to speak an effective word on the topic of 'Christian faith and evolutionary theory' at all.“

A different appraisal is certainly deserved by the two-semester reading series that started at the TU Dresden during the summer term of 2005 within the framework of the 'studium generale' of the Catholic academy in the diocese Dresden-Meißen; it is offered to the university hospital at the TU Dresden and the association of German biologists and bio-scientific professional associations in the Bischof-Gerhard-Saal in the Haus der Kathedrale under the title „creation and evolution“. The organizers used a good text to advertise the reading series and it was opened by the president of the Alexander von

Humboldt foundation, professor Wolfgang Frühwald, who never makes a secret of his Christian orientation. Furthermore, the organizers were able to gain professor Robert Spaeman as the perhaps best imaginable contributor to the philosophical judgement of evolution; in addition, there are a series of other high-caliber scientists, such as Klaus Berger, professor of theology. However, that of all people also the chimpanzee-professor Sommer and the multiply cited Franz Wuketits would speak (of all things) on the topic of „evolutionary epistemology and the idea of man“ in parochial surroundings, will at least for my part take some getting used to; although, from the church perspective, it is probably hailed as success to be represented even at the university. I am eagerly curious about the program for next semester.

13. Evolutionism and ethics

The proclaimers of absurdity simultaneously contend high ethical standards for evolutionism. For example, it is claimed that man could become a better person, if the alleged truth about himself -that is, not having free will nor responsibility for his actions- were to be promulgated in media and schools. On a website of evolutionary biologists, creationists are accused of being a sociopolitical danger, because they want to anchor a „different system of values based on the norms of religious-fundamentalist dogmas“, so that a free, enlightened society and world order could not exist. Sometimes Neodarwinists also wrongly reclaim medical developments that are connected to the resistance of pathogens for themselves alone, in order to discriminate against their opponents. However, the above-mentioned Book of Wisdom of the Old Testament has a different answer to offer to the question of their motivation. There, the godless say:

„Our lifetime is but a passing shadow and our Earth does not repeat itself, because it is sealed and none will return. Come now! Let us enjoy the momentary goods and eagerly exploit the world as in early life.“ A little further it says: „Ours be the mighty norm of justice, because the weak proves itself as worthless.“

As is generally known, Hitler used the principle of selection and the natural victory of the fittest in the fight for survival, to first justify the annihilation of the disabled and then the Jews as well as many other groups of people. Something similar applies also to communism. Today, the ideological connection to Neodarwinism can be easily recognized in all problems concerning the protection of life; from the mass-killing of unborn children, the releasing of embryos to research and the cloning of humans, to euthanasia, which has been revived from ostracism.

In a lecture at the Parisian Sorbonne in 1999, our new Pope said still as Cardinal Ratzinger: „But this evolutionary ethos, which inescapably finds its key concept in the model of selection, that is, in the fight for survival, in the victory of the stronger, the successful adaptation, has little comfort to offer. Even where one strives to beautify it in various ways, it remains in the end a horrible ethos.“

14. Summary

A contradiction between true scientific findings and Christian faith is not possible, as long as the conclusions offered by science are restricted to the corresponding methods. Christian faith is compatible with a wide variety of evolutionary theories, if a certain amount of minimum requirements are fulfilled. Moreover, many authors- among whom evangelicals are the most fervent - expose many shortcomings, contradictions and circular argumentation of evolutionary theories, which demonstrate that the greater part of questions still remain open.

Therefore, faith is by no means endangered with regard to the objective ideological debate. However, great dangers to people's faith have developed because atheistic-materialistic evolutionism – in part brought about deliberately, in part passed on with good intentions by the already 'seduced' - dominates the field almost exclusively in mass media as well as in school textbooks (at least in

Germany). Moreover, evolutionism has even massively penetrated Catholic educational institutions. The right answer to the miraculousness that we come upon in the world, in nature, and especially in us humans, is amazement at the mysterious action of the Creator.

Let me close with a further statement from the afore-mentioned lecture by Pope Benedict XVI., one of the great thinkers of our time. „The question is, whether evolutionary theory may act as a universal theory of everything real, past which further questions of origin and essence of things are no longer admissible and also no longer necessary, or whether such questions of finality do not overstep the domain of that which can be explored by pure scientific investigation.“

„The question is, whether or not reason or the reasonable stands at the beginning of all things and on its foundation. The question is, whether reality developed because of coincidence and necessity...because of 'unreason', that is, whether reason is a coincidental by-product of unreason and ultimately also meaningless in the sea of unreason, or whether what forms the fundamental conviction of Christian faith and its philosophy remains true: In principio erat Verbum – at the beginning of all things stands the creative power of reason. Today as yesterday, Christian faith is the option for the priority of reason and reasonableness. This question of finality, as already mentioned, cannot be decided by scientific arguments and also philosophical thinking reaches its limits here. In this sense, there is no final provability of the Christian fundamental option. However, can reason with the priority of reasonableness before unreason forgo the primordial Logos without annihilating itself?“ And finally he concludes: „Because of its option for the primacy of reason, Christianity remains 'enlightenment' also today, and I believe that an enlightenment that strips off this option, would have to mean, despite all appearances, not an evolution, but an involution of enlightenment.“