

BEYOND HUMANISM: TRANS- AND POSTHUMANISM
JENSEITS DES HUMANISMUS: TRANS- UND POSTHUMANISMUS

Edited by / Herausgegeben von Stefan Lorenz Sorgner

Evolution and the Future

Anthropology, Ethics, Religion

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Stefan Lorenz Sorgner
and Branka-Rista Jovanovic

In cooperation with Nikola Grimm

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Vol./Bd. 5

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Bibliographic Information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available in the internet at <http://dnb.d-nb.de>.

Cover Design: © Olaf Gloeckler, Atelier Platen, Friedberg

Cover image: Jaime del Val: Microsexes Metaformance.
Photo by Claude Fournier, Toulouse, 2010

Library of Congress Cataloging-in-Publication Data

Evolution and the future : anthropology, ethics, religion / edited by Stefan Lorenz Sorgner, and Branka-Rista Jovanovic, in cooperation with Nikola Grimm.

pages cm. — (Beyond humanism: trans- and posthumanism, ISSN 2191-0391 ; vol. 5)

ISBN 978-3-631-62369-5

1. Human evolution—Philosophy. 2. Human evolution—Forecasting. I. Sorgner, Stefan Lorenz, editor of compilation.

GN281.E886 2013

599.93'8—dc23

2013013940

ISSN 2191-0391

ISBN 978-3-631-62369-5 (Print)

ISBN 978-3-653-02671-9 (E-Book)

DOI 10.3726/978-3-653-02671-9

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Internationaler Verlag der Wissenschaften

Frankfurt am Main 2013

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Peter Lang – Frankfurt am Main · Bern · Bruxelles · New York ·

Oxford · Warszawa · Wien

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Acknowledgements

The editors of the project “Evolution and the Future” thank the publishing house Peter Lang for enabling us to realize this book project. Financial support for the publication came from Kurt Benning, Dieter Mosburger and Siegfried Brenke for which we are extremely grateful, because the publication of this volume would not have been possible without it.

As the various contributions to this volume were originally written for the conference “Evolution and the Future” which took place in Belgrade in October 2009, the sponsors of the conference listed below contributed enormously to the realization of this project. Please accept our best thanks:

Ministry of Science, Technology and Development, Republic of Serbia

Ministry of Religions, Republic of Serbia

Embassy of the Kingdom of Holland, Belgrade

U.S. Embassy, Belgrade

Australian Embassy, Belgrade

British Council, Belgrade

Goethe-Institute, Belgrade

Austrian Cultural-Forum, Belgrade

Yugoslav Cinematheque, Belgrade

NIKOLA TESLA Museum, Belgrade

NGO Responsibility for the Future, Belgrade

Konras Publisher, Belgrade

Haimos Music Society, Belgrade

Serbian Post

Telekom Serbia

Electronic Power Station Serbia

Intesa Bank, Serbia

AIK Bank, Serbia

Konsig Group, Belgrade

Holliday Travel, Belgrade

Hotel Continental, Belgrade

The conference was organized primarily by Branka-Rista Jovanovic in cooperation with the University of Belgrade, the NGO Responsibility for the Future and INES.

The Editors, November 2012

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Introduction

Evolution Today

Stefan Lorenz Sorgner / Nikola Grimm

Darwin's theory of evolution has been one of the most groundbreaking scientific insights during the past centuries. Its importance, relevance and implications have not yet been grasped in all their depth. This essay collection aims to provide some selected contemporary perspectives upon the potential of this theory for our contemporary world and for future generations. The collection does not aim at a comprehensive analysis of the challenges in question, but merely tries to follow and deal with some of the most central traces of the theory.

In the first part of the introduction, a brief analysis will be given of the relationship between the theory of evolution and central contemporary cultural movements, whereby our focus lies on meta-, trans-, and posthumanism, so that the relevance of the theory of evolution for cultural debates is being hinted at. In the second part of the introduction, the various contributions to this collection are being summarized.

Cultural History after Darwin

Darwin's theory of evolution and Nietzsche's perspectivism are two of the most important cultural insights during the previous 150 years. Both have shaped significantly the way many enlightened human beings grasp the world today, and both concepts have brought about a paradigm shift in many Academic disciplines and in the life world in particular in the enlightened parts of this world.

Still, the importance of Darwin's naturalism has long been neglected in many cultural fields apart from the natural sciences, e.g. it did not play a dominant role during postmodernity. The postmodern era can be characterized as the times during which the doubt concerning the truth as correspondence to the world and together with this insight the need for continuous processes of interpretation and play were seen as the basic constituent of our culture. It was the period of time during which a specific aspect of Nietzsche's philosophy, namely his perspectivism, was particularly influential. However, during the previous 40 years, Darwin's theory of evolution and hence, also his naturalism has steadily gained further cultur-

al recognition which can be seen in the fact that Academic disciplines like evolutionary ethics, epistemology or aesthetics have only been developed seriously then. This process is the reason how postmodernity has developed into post-humanism which can be seen as a leading cultural movement in enlightened, mostly Western, countries.

Posthumanism affirms Nietzsche's perspectivism, and hence its postmodern basis, but also regards a naturalist, this-worldly or materialist interpretation of the world as the most plausible one, which is the reason for posthumanists to seriously consider naturalist processes, the theory of evolution and phenomena which used to be interpreted by reference to non-natural entities, like the mind, consciousness, or free will during the humanist era. Posthumanism distinguishes itself from a particular understanding of humanism which can be characterized by the affirmation of categorical dualities, like the one between a material body and an immaterial soul, as it can be found in Christian and Kantian versions of humanism. It is a matter of dispute when this understanding of humanism began to dominate Western cultures. The Stoic times (Sloterdijk) and the Renaissance (Hassan) have been mentioned as potential starting points.

The above mentioned growing cultural importance of naturalist thinking cannot only be seen in the development of new academic fields, but also in public discourses. Most noteworthy here is the fight between creationists and defenders of the theory of evolution concerning the question what ought to be taught in biology classes, which takes place in various parts of the world; e.g. in May 2012, references to evolutionary theory were removed from science text books which are being used in South-Korean schools. Of course, not all defenders of the theory of evolution agree on how exactly the theory ought to be understood. During the second half of the Twentieth century, Lamarckianism which claims that acquired characteristics can be inherited was not too popular. Due to the discovery of epigenetic procedures, it has been taken more seriously again and it has reentered public discourses during the beginning of the twenty-first century. Both the relationship between the theory of evolution and religion as well as the question of epigenetics will be dealt with within this collection.

Not only descriptive aspects of evolution have been discussed in public and in academic settings. Normative questions related to evolutionary theory combined with the progress concerning the options in the field of humanbiotechnologies have developed in an active field of research since the beginning of the twenty-first century. Most of the relevant issues can be summarized under the heading of the enhancement debates within the field of bioethics which is divided into the fields of genetic enhancement (by selection and modification), Cyborg enhancement (e.g. brain-computer interfaces), pharmaceutical enhancement (e.g. ritalin, modafinil), morphological enhancement (e.g. plastic surgery) and moral enhancement (e.g.

citalopram and serotonin; oxytocin). This development became possible because a growing number of scholars have accepted the following premises:

- human beings and great apes have common ancestors and are natural beings which have not always been in existence but came into existence as a consequence of natural selection.
- there is nothing in the naturalist world which is not subject to change, and hence it seems highly likely that human beings will die out eventually and/or develop into a different species.
- it seems probable that human beings are neither the highest and best beings on earth, nor the end of the evolutionary chain.

Given that we have also developed the capacity to alter both genotype as well as phenotype of a human being, this raises the question whether the next step in evolution will still depend upon natural selection, and whether this ought to be the case, because human selection might also be a good option for the coming about of the posthuman, e.g. the next step within the process of human evolution.

As a consequence of these developments, it is not much of a surprise that a group of scholars entered both academic as well as popular discourses, who regard it, in some cases, even as a moral duty to promote this development away from the current constitution of human beings. This influential movement calls itself transhumanism.

It is important not to mix up trans- and posthumanism, even though their names sound similar and the concept of the posthuman comes up in various different meanings within both of them. However, these two movements have different cultural roots and uphold different ideals of the good. It is not the case either that both movements do not have anything in common, because both reject Christian and Kantian versions of humanism and hence a dualist understanding of human beings, which implies that human beings are composed of two radically separate substances, namely that of immaterial soul and that of material body. Yet, it is this understanding of human beings which is still dominant in many official documents of Western countries; e.g. in many constitutions, it is being taken for granted that human beings are categorically superior to all other solely natural beings, which they regard as the reason that only human beings are bearers of dignity, and the German constitution represents a paradigm example where only human beings are bearers of dignity and animals are supposed to be treated like things from a legal perspective, even though it is not the case that they are seen as things. It is this traditional Western dualist understanding of human beings according to which only human beings have a categorically special status in the world due to their immaterial rationality which is often part of their rational soul and which is often the reason, too, why only human beings are regarded as

beings that are created in God's image. Both trans- as well as posthumanism reject this understanding of humanism. They differ, however, with respect to their main goal. It is the main goal of many posthumanist thinkers to spell out in detail this move away from humanism. On the other hand, most transhumanist thinkers regard the insight just mentioned as starting point for their main goal, namely to reflect upon and to promote the coming about of the posthuman. The following description concerning the cultural embeddedness of various movements away from a dualist concept of humanism is supposed to provide an initial map of some influential contemporary discourses in both the English speaking as well as the continental philosophical realm.

Post-, Trans- and Metahumanism

Posthumanism is a cultural and philosophical movement which is being based in the continental European philosophical and the Anglo-American literary and cultural theory context, and it is intimately connected to postmodernity, because it is an immediate outgrowth of it. In contrast to postmodernity, which is based mainly on perspectivism, posthumanism combines the perspectivism with an affirmation of naturalism, materialism or another type of immanentism. Postmodernists claim that all perspectives are interpretations and apply this insight to various fields of discourses and aspects of the life world. Posthumanists agree with this insight. However, they also affirm that even though immanentism is an interpretation, it is the most plausible one to hold, because it does not depend on metaphysical, two-worldly entities with which we cannot be acquainted immediately.

The term "posthumanism" was coined initially by Ihab Hassan in the article "Prometheus as Performer: Toward a Posthumanist Culture?" from 1977. The leading proponents of posthumanism so far are mostly philosophically minded literary critics and cultural theorists, like Donna Haraway who wrote "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" (1985, updated version 1991) and Katherine Hayles who wrote "How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics" (1999). A literary minded philosopher like Peter Sloterdijk can also be seen as a posthumanist thinker, and he used the term posthuman in some of his writings, e.g. in his infamous essay "Rules for the Human Zoo" from 1999. Also scientifically minded philosophers such as Francisco Varela, Evan Thompson and Humberto Maturana can be seen as associates of the posthumanist project. Their book "The Embodied Mind: Cognitive Science and Human Experience" from 1991, or Varela's and Maturana's "Autopoiesis and Cognition: The Realization of the Living" from 1980 represent many traces of what posthumanism stands for, e.g.

plurality, perspectivism and immanentism. It is their way of dealing with the theory of evolution which reveals the relevance of this topic for the posthumanism. The geneticist Eva Jablonka can be seen as being related to posthumanism from a scientific perspective, too. Her book “Evolution in Four Dimensions” coauthored together with Marion Lamb and published in 2005 stands for posthumanism within evolutionary biology. Given the wide spectrum of researchers and thinkers who are related to posthumanism, it can be described as a diverse and a temporarily strong cultural movement.

The next such movement is more unified, but also intimately related to the question of evolution, because the thinker who coined the term transhumanism belongs to the English language tradition of the theories of evolution: Julian Huxley. The Darwin supporter Thomas Henry Huxley was his paternal grandfather, and the author of the novel “Brave New World”, Aldous Huxley, was his brother. The lesser known half brother Andrew Huxley, a biologist, won the noble prize. Julian Huxley was a member of the British Eugenics Society and even their president for several years. In 1957, he coined the term “transhumanism” in his monograph “New Bottles for New Wine” by stressing the need of human beings to transcend themselves by means of the usage of science and technology. However, the contemporary concept of transhumanism is more closely related to the ideas of the Iranian futurist Fereidoun M. Esfandiary, better known as FM-2030, who wrote the “Upwingers Manifesto” (1973) and the book “Are You a Transhuman?: Monitoring and Stimulating Your Personal Rate of Growth in a Rapidly Changing World” (1989), and his former partner Natasha Vita-More who wrote the “Transhumanist Arts Statement” which came out in 2003 and which is a revised version of the “Transhuman Manifesto” from 1983. Nowadays, Natasha Vita-More is married to Max More, whose essay “Transhumanism: Toward a Futurist Philosophy” from 1990 was particularly influential in forming the currently dominant understanding of the term. However, his libertarian sympathies have also been criticized by many fellow transhumanists who are associated more closely with a social-democratic understanding of transhumanism which is being represented best by James Hughes within his monograph “Citizen Cyborg: Why Democratic Societies Must Respond to the Redesigned Human of the Future” which can also serve as an excellent introduction to transhumanism. A further significant step for the cultural influence of transhumanism was the foundation of the “World Transhumanist Association” in 1998 and their “Journal of Transhumanism” which was renamed “Journal of Evolution and Technology” in 2004 and transferred to the “Institute for Ethics and Emerging Technologies” (founded in 2004 by Nick Bostrom and James Hughes).

In contrast to posthumanism, transhumanism is closely related to the English speaking world of the natural sciences, analytic (bio)ethics and utilitarianism,

and is characterized strongly by the affirmation of the use of sciences and technologies in order to promote human capacities. The human capacities mentioned most often in this context are intelligence, health, memory, the capacity to concentrate, and the prolongation of the human health span which is different from the human life span because it stresses the relevance of the period of time in which one lives healthily. However, a great variety of capacities are being mentioned among transhumanists when these issues are being discussed. What is most relevant from the transhumanist perspective is that the development of the capacities leads from human beings via the transhuman to the coming about of the posthuman. However, it is a matter of dispute among transhumanists whether the posthuman is still a member of the human species, but has one capacity which goes beyond the capacities of currently living human beings (Bostrom) or whether the posthuman is actually a member of a new species (FM-2030). As the enhancement of human capacities is one of the key features of transhumanists, their positions represent strong voices within the bioethical enhancement debates which have taken place since the beginning of the 21st century. Due to the relevance of these debates concerning the possibility to enhance evolution, this movement is relevant for the debate concerning evolution and the future, too.

Most recently, the Spanish artist Jaime del Val and the German philosopher Stefan Lorenz Sorgner recognized the need to bridge the gap between posthumanist and transhumanist discourses and developed a philosophical and artistic attitude which moves *beyond* a traditional dualist version of humanism, but which also lies *in between* trans- and posthumanism. They named their own approach metahumanism, because “meta” means both “beyond” as well as “in between” and hence covers both aspects of their initial intention whereby Sorgner is more closely related to the English language tradition and del Val more closely to the French philosophical world. However, due to their common high estimation of Nietzsche and his perspectivism, their disrespect of paternalistic structures and their high evaluation of radical plurality, they managed to form some guiding principles which both of their works have in common.

An important step for realizing an exchange or bridge between post- and transhumanism was a special issue of the “Journal of Evolution and Technology” which was dedicated to the topic “Nietzsche and European Posthumanisms” (2010) in which articles critically dealt with an article by Sorgner concerning the relationship between Nietzsche and transhumanism from 2009. This exchange continued in the Fall 2011 issue of the journal “The Agonist” published by the Nietzsche Circle/New York in which several leading Nietzsche scholars responded to the ongoing debate. In Sorgner’s further response published in this special issue, he put forward a bioethical position which can be seen as a weak version of transhumanism which is deeply embedded in the continental philosophical tradition

and thereby also stands for a weak version of posthumanism. A central issue of the debate was the question concerning the relationship between Nietzsche's overhuman, the transhumanist concept of the posthuman and the ethical question concerning the moral obligation to promote human capacities. Again, the question concerning the future of human evolution was a focal point of the philosophical debate.

Evolution and the Future

The importance of Darwin's theory of evolution for contemporary cultures, and philosophical and artistic reflections in the 20th and 21st century and with respect to some strong cultural movements of today reveal the central motivation of this book project. The project unites selected papers of the conference "Evolution and the Future" which took place in October 2009 in Belgrade and which was organized by Branka-Rista Jovanovic in cooperation with the University of Belgrade, the NGO Responsibility for the Future and INES. Leading scholars from a diversity of cultural, ethical, and scientific backgrounds consider the relevance of the theory of evolution and the potential impacts of this theory and its implications for future developments. Within this collection the fields "Anthropology, Ethics, Politics, Religion and Science" were considered in particular detail.

Anthropology

At the beginning of this collection and as an initial input into the wide discussion, three perspectives are being presented concerning the basic entities which have to be dealt with when considering evolution: ourselves, the anthropos, human beings. In the article "The Responsible Self – Questions after Darwin" the Catholic theologian Hille Haker presents lines of thought concerning a new concept of the self. In the first part she summarizes existing concepts of the self, whereby she identifies three basic characteristics of the notion of the self and identity in the 20th century: subjectivity, practical identity and the moral self. In part two she considers the relationship of the characteristics by focusing on the question of self-identity, whereby she is pointing out two main concepts, which are important for the constitution of the self: "belonging as recognition" and "selective narration". Based upon some insights of the neuroscientist Jean-Pierre Changeux and the philosopher Paul Ricoeur, Haker discusses the place of one-self finding itself in the dialectic of social constitution and the self-discourse in narration. In between

these two characteristics, Haker emphasizes the development of a moral identity in the third part of her paper by stressing the accountability for one's actions despite the dependence on others in a certain context. In the fourth part the author puts forward a concept of the "responsible Self" by considering further the interaction of biology and morality. According to Hille Haker, the theory of evolution has to accept that natural selection is based on the "hermeneutic principle of narrative selection", which is constitutive for a whole human being, being a moral agent in the end.

The theory of evolution provides the framework of Ottfried Höffe's argument of his article "Homo Sapiens – Animal Morabile". There, he focuses on the question why and how natural evolution creates a moral being like the human, which he develops in seven steps within the field of "philosophical-moral anthropology". Departing from the existing skepticism concerning such an anthropology, he argues for its possibility and shows its internal logic. Thereby, he considers the biological basis of morality and also ethical naturalism. As a fifth step Höffe explains that humans have a non-specific and potentially dangerous overdrive that needs to be directed, which takes him to the question whether animals can be moral. In a provisional conclusion he explains two ways of grasping morality: Firstly, he regards morality as possible due to the "intelligence and openness to the world" of human beings. Secondly, he sees morality as necessary because of the human "overdrive and openness to the world". Hence, morality is not given by birth but it is linked to the development of one's own personal standards and powers during a lifetime.

Ethics

Both animals and human beings are being considered in Sarah Chan's argument of her article "Enhancement and Evolution". In three parts she puts forward reasons in favour of the enhancement of humans as well as of animals. By analyzing general main issues of the enhancement debates in part one, Chan stresses the need for human enhancement, including even "a moral imperative to use it for the benefit of future generations". The future of evolution with respect to human enhancement is the main topic of part two. Instead of these processes leading to a loss of humanity, Chan sees the chance to redefine what this word will mean by developing a concept of human being, who is able to reflect about himself and shape and change the world according to his wishes. Hence, she does not regard the effects of enhancement on evolution as dangerous, but defends them as process, which lies in continuity with human nature. In the context of enhancing evolution, the third part is dedicated to the question concerning the

enhancement of animals. Hereby, she finds positive moral reasons to promote such processes, as she points towards the obligation not to limit enhancement to one biological species only, but to include creatures who share “the qualities we value”. Given this approach, it might be even our duty to make animals capable of deciding for their own best.

Nikolauf Knoepffler’s contribution, on the other hand, is focused solely on the human species with respect to the debates concerning genetic enhancement. The title of his article represents its goal: to give an “Ethical Assessment of Human Genetic Enhancement”. After providing the reader with a definition of the “meaning and limits of the topic” to explain the framework of his argument, Knoepffler focuses on the moral concept of human dignity, which is the central norm of bioethical discussions in Germany and in many other international charters and laws. Then, he shows how to make normative judgments concerning ethical questions by dealing with conceptual categorizations of various types of genetic enhancement. In the end, he develops a sketch of how to proceed concerning genetic enhancement on the basis of human dignity and applies his method at three cases: Improving the human eye, improving memory performance and changing the behavior of a pedophile. By relating each of the examples to his moral basis, he reveals a way of considering the case in question and hints at a possible solution.

In contrast to the dominant evaluation of genetic enhancement in Germany and in many other countries, Stefan Lorenz Sorgner’s main goal is to provide some reasons for holding that “genetic enhancement does not have to be seen as morally problematic” in his article “Evolution, Education and Genetic Enhancement”. Thereby, he employs the method of revealing structural analogies between traditional procedures and genetic enhancement, and he regards genetic enhancement as the most promising technology for having evolutionary consequences. His argument progresses in three steps. Firstly, he describes various concepts of enhancement, whereby he explains why he focuses on heteronomous types of genetic enhancement during the following parts of his paper, in particular genetic enhancement by selection and by modification. Secondly, he explains why genetic enhancement by means of selection and choosing a partner for procreative purposes ought to be seen as structurally analogous, and thirdly, he puts forward some reasons for claiming that the same applies to genetic enhancement by means of modification and classical education. According to Sorgner, it is highly likely that genetic enhancement does not have to be morally problematic, as classical education and choosing a partner for procreative purposes do not have to be morally problematic procedures.

Politics, Religion, and Science

The third section begins with the article “On the Origins of Modern Science: Copernicus and Darwin” by Francisco J. Ayala in which he shows parallels between the Copernican and the Darwinian revolution, as he aims at a reinterpretation of the meaning of these two events. Darwin follows and finishes a process which has been initialized by Copernicus by extending the reduction of natural laws to human beings. In contrast to many scholars who regard the theory of evolution mainly as an insult to human self-understanding, like Freud, whose psychoanalysis is considered as the third significant insult, Ayala appreciates both events as shades of one process towards the scientific worldview which we share nowadays. Then, Ayala concentrates on Darwin’s theory and his main work, the “Origin of Species”, to explain its essential line of thoughts and to help grasp evolution as a non-directive, but nevertheless creative process without the need of a supernatural designer.

Michael Epstein, on the other hand, does not exclude the possibility of a supernatural designer, and relates the question of evolution to the one concerning religion and belief in general. His article “Technology as a New Theology – From “New Atheism” to Technotheism” is split up in five parts. Firstly, Epstein criticizes the genocentrism Dawkins has developed in his book “The God Delusion”. He regards Dawkin’s view as a “new religion”, in which God’s place is being replaced with that of genes. In contrast to existing religions, this one is supposed to be more reductive and simplistic, as it reduces human beings to “slaves of genes”. Epstein furthermore stresses that the loss of morality is an immediate consequence of the theory of the selfish gene. In the second part he argues in favor of the existence of God as the creator of the Universe. In contrast to the understanding of technology as process which leads people away from believing in God, Epstein regards the development of technologies and sciences as an easier way of approaching God: Being a human creator facilitates grasping the concept of being created oneself; to experience the possibilities of technologies enables people to open up for the idea of God’s omnipotency. To extrapolate from science to God is a new way of grasping God. By analyzing some of Bostrom’s reflections in part three, he develops this line of thought further. In parts four and five, he stresses the probability of there being a God, and explains why this insight is consistent with our concept of technology. To integrate this understanding of technology within a religion would complete and enrich both fields, from Epstein’s perspective, and it is this wish with which he ends his paper.

Dawkins theories are also the main focus of Dietmar Mieth’s article “Evolution and the Question of God and Morality – The Debate over Richard Dawkins”. His

argument is divided up into two steps. Within the first part of his article, Mieth introduces new lines of thoughts into the debate concerning Dawkins' position. In the second part, he stresses the need for further critical reflections on science. In his criticism of Dawkins point of view, he reveals deficits within his arguments, although he admits the relevance of some of Dawkins' critical arguments against religion, e.g. the reversal of the authoritarian fallacy. Mieth stresses the need to be fair by pointing towards the "religious heritage of humanist thought". The second part of his text refers to the role of prejudices within biosciences to demonstrate the science's "belief" it has in itself. Thereby, science seems to be self-contradictory: it is moved by the belief in an uncertain knowledge but condemns any other types of belief. Mieth stresses the relativity of knowledge and argues for freedom and responsibility in scientific research. He concludes by referring to incoherences which are typical for a modern scientific approach and which manifest themselves in Dawkins' reflections, too.

The phenomenon of evolution within the political sphere is being presented by Vojin Rakic in his article "The Evolutionary Theory Applied to Institutions". He particularly concentrates upon the impact of European integration on higher education policies, whereby his specific focus lies on six exemplary states of the European Union: Germany, the Netherlands and Belgium/Flanders, Great Britain, Sweden and Finland. Firstly, he exemplifies different concepts of convergence and divergence, brief change, to be able to conclude that the states rather converge than diverge. From this description he develops a "general scheme" of possible reasons. The next step within his paper is the question, whether significant changes have occurred in the six states and to what extent this was the result of EU policies. In this context, Rakic provides us with a general overview of the development in each of the states. In the following chapter, Rakic checks the plausibility of his "scheme" with respect to two existing theories that explain imitation mechanisms. In a final epilogue, Rakic refers to evolutionary theory in particular. By means of the analogy between education policies and life in the context of evolution, he reaches the following conclusion: The adaption of higher education policies to a competitive and globalized environment does not exclude the influence of political leaders of a system; life does not depend on evolutionary selection but allows the existence of a creator. This insight stresses the compatibility of evolutionary theory and intelligent design which is the main conclusion of this article.