

## THE HUMAN BEING – GOD’S PLAN OR JUST SHEER CHANCE?\*

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In the present debate between creationist theology and evolutionary biology a new front seems to be opening up on old battlegrounds long considered pacified. The main opponents in this battle are a fundamentalist-biblicistic creationism and a materialist and reductionist version of evolutionary biology.

Thus, the Germany-based Giordano Bruno Foundation, which was established in 2004 and is emphatic on criticism of religion, polemically advocates this reductionist version, while claiming to argue from a responsible scientific point of view but going in fact far beyond what is scientifically admissible. Likewise, in the USA, modern creationists of the Center of Science and Culture founded in 1990 as part of the Discovery Institute equally make scientific claims in arguing for their version of a biblicistic creationism.<sup>1</sup> However, they simply fail to come up to the level of theological exegesis and Bible interpretation at the universities.

Again, we are confronted with the unfortunate tension and the unreasonable or foolish fission between, on the one hand, the sciences which want to annihilate religion, and, on the other hand, religion which thinks it must put the sciences right.

\* I have to give thanks to Wolfgang Butzkamm (Aachen) for the translation.

<sup>1</sup> Cfr. Davis, P., Kenyon, D., Dembski, W., Wells, J.: (1st & 2nd Ed) *Of Pandas and People: The Central Question of Biological Origins*. 1. u. 2. Aufl. Richardson Texas 1989 f. *Dies.: The Design of Life: Discovering Signs of Intelligence in Biological Systems*. (geänderter Titel in der 3. Aufl.). Ed.: Foundation for Thought and Ethics, Richardson Texas 2007; Junker, R., Scherer, S.: *Evolution. Ein Kritisches Lehrbuch*. Baiersbronn 6. Aufl. 2006; Kutschera, U.: *Streitpunkt Evolution: Darwinismus und Intelligentes Design*. Münster 2007.

## 1. THE PROBLEM OF AN ALL-ENCOMPASSING THEORY

A central point of contention has been the concept of chance and the consequences deriving from it, consequences both for our individual lives and for our intellectual sense of self as a human being.

Some evolutionary biologists claim that due to the randomness of mutation there is no sense in evolution, and even more than that, that such a sense would theoretically be quite impossible. They espouse ideas held by the molecular biologist Jacques Monod in his book *Chance and Necessity*, (who famously said: 'The universe was not pregnant with life, nor the biosphere with man'). According to him, the existence of chance in the evolution and reproduction of life excludes the idea of design, plan, or God as a sense-giving, purposeful planner. On the other hand, religion is a phenomenon we simply cannot overlook; it is a visible, tangible, and, it seems, ineradicable reality, and, along with it, the assumption of an all-comprising, divine plan is equally realistic. Does man owe his existence to mere chance, be it pleasant or pitiable, or is he the result of divine Providence? This is *the* alternative we are faced with.

Although many evolutionary biologists deny such an all-encompassing divine plan, something of the sort is implied when they interpret the phenomenon of religion in a biological, population-dynamic way. In the words of A. von Hayek: 'Religion survives, because it produces offspring'. This is their tenet or dogma, and one could add, 'not because it is true or because there is a God'.

Accordingly, religion makes sense in a way religious man is not aware of, and that sense is said to lie in a 'side effect', namely, an optimized care for offspring, which is then made its main function and only sense. Thus, on the quiet and almost secretly, a sense emerges after all, despite all that chance. It is, however, a biological sense, not a theological one.

It is imaginable that man, although endowed with a vague idea, cannot understand the entire concept, because he must always remain its integral part and cannot be or become its uninvolved observer facing the world from an outside perspective.

Sometimes there are biologists who want to explain to people of faith, including theologians, that the content of their beliefs is absurd and nothing but a socio-cultural result of evolution. David Sloan Wilson, for example, came forward as a biologist to enlighten theologians in recent times. Because of religious fictions, it would be easier for the human species to cope with the real world. By means of religious practice, men could pro-

duce a brood-friendly environment within a logical structure they didn't really understand themselves.

And then such an advocate of enlightenment, after explaining what religion really is, declares himself an atheist, whatever that means. That strongly reminds me of someone who at the annual meeting of the chess club explains that chess is a dialogically structured exercise to perfect one's motor skills; namely, the fine motor skills for playing chess on a table and the gross motor skills for playing chess on grass. And that this would be the evolutionary gain, which can be understood in biological terms, but cannot be grasped by the chess player.

In addition, this advocate of enlightenment, in order to stress his objectivity, may state that the rules of chess, whose existence the chess player claims, are of no relevance whatsoever and don't need to be taken notice of and that he, the advocate of enlightenment himself, doesn't know them.<sup>2</sup> What kind of enlightenment is this? Perhaps it is good enough for this self-styled advocate of reason, but not for a reflective person. How pleasantly different is, in contrast, the position of someone like the philosopher Jürgen Habermas, who, before completely denying the genuine significance of religion, at least admits the possibility of just being 'religiously nonmusical' as an individual.

I think we can accept that there is – perhaps – this population-dynamic side-effect, but we cannot accept that it should be the main and only function. Some biologists try to make evolution-theory the main theory in explaining the world as a whole. But there must be a philosophically good argument advanced from outside of biology, which could convince us that the biologist point of view is the best and the one with the highest certainty.

## 2. THE PROBLEM OF THE NOTION OF CHANCE

To clarify the question of whether chance or a Deity have a hand in this, we have to specify the notion of chance, and this attempt at greater preci-

<sup>2</sup> Bahnsen, U.: Vom Nutzen der Frommen. Der Amerikanische Biologe David Sloan Wilson hält es für erwiesen, dass Glaubenssysteme nach den Regeln von Darwins Evolutionstheorie entstehen. Ein Gespräch über den Sinn der Religionen. In: *Die Zeit*, Nr. 52, 21. XII. 2005, S. 33.

sion is certainly in the best interests of science. What must be distinguished is – and in this I follow Gerhard Vollmer –:<sup>3</sup>

1. objective chance or randomness, as it is seen to be observable and stochastically quantifiable, but not reconstructible in causal analysis, with phenomena of quantum physics, and
2. subjective chance or randomness, as it occurs in biology, for instance, which is in principle accessible to a causal analysis but which, for pragmatic reasons, cannot be carried out.<sup>4</sup>

When determining the frequency of mutations for individual gene spots of higher animals, instead of random distributions, mutations accumulate in distinct areas, often called hot spots, which can and need be analysed. These mutations can only be called random in relation to their selective environments. This means they occur more or less independent of the environment, but only in as much as, or to the extent that the selective milieu itself does not contain mutagenous agents, that is substances that can induce mutations. In order to describe this independence of mutations from a selective milieu, the term randomness should not be used. It would be better just to speak of a lack of correlation or a lack of interdependence between mutation and selection. And this is what the Fluctuation Test of Delbrück and Luria (1943), the Spreading Experiment of Newcombe (1952) and the Replica-Technology of Lederberg (1952) can show.<sup>5</sup>

Even the notion of chance, as found in the books of Ernst Mayr, who is one of the founders of the Synthetic Theory of Evolution, shows that we are confronted with subjective chance. Mayr reconstructs the biological chance out of five factors:<sup>6</sup>

1. Mutation in one or more geneloci;
2. Crossing over;
3. Distribution of chromosomes in meiosis;
4. The lucky or unlucky fate of the gametes;
5. The lucky or unlucky fate of the zygotes.

<sup>3</sup> Vollmer, G.: Zufall in der Biologie. In: *Herder Lexikon der Biologie*. Heidelberg, Berlin, Oxford, Bd. 8, S. 509 f.

<sup>4</sup> The highly interesting experiments of Rafael Vicuña, a part of them published in these proceedings ('Bacterial Evolution: Random or Selective') show that in biology we have to do it with the second type of chance, with – in the diction of Gerhard Vollmer – the subjective chance.

<sup>5</sup> Cfr. Hagemann, R.: *Allgemeine Genetik*. Jena, 2. Aufl. 1985, S. 107 f.

<sup>6</sup> Mayr, E.: *Evolution und die Vielfalt des Lebens*. Berlin, Heidelberg, New York 1979, S. 18.

When the Dictionary of the history of Ideas says that ‘this element, generally known as chance, could conceivably be the failure of man to know all possible factors affecting an outcome’, then it does underline the position Vollmer has taken.

The question is whether from this notion of subjective chance or randomness as used in biology any inferences can be drawn as to our image of man.

Can we conclude from the biological fact that in the course of evolution innumerable species have died out or not developed to any recognizable degree that there is basically no tendency, no direction, no improvement and no increase in complexity?

Does the concept of chance as it is normally used in biology warrant the assumption that there is no aim, no plan, no sense in evolution as Monod, Wilson, Dennett, Wuketits and others have claimed?<sup>7</sup>

The answer to both questions is a clear no. For one thing, from the mere fact that a certain result was not reached, it cannot be inferred that it had not been aimed at – by whatever processes or strategies. I may have had the intention to go to the station even if I did not reach it because I misread the map or because I gave up when I realized I would be too late for the train.

For another thing: It is perfectly possible to interpret the seeming randomness of mutation as an exploratory, innovative and distributive element in a larger plan, without disclaiming the theory of evolution in any sense.

Randomness in this sense is just another word for not yet predictable with any certainty and is neither synonymous with chaotic, nor synonymous with directionless processes either; if chance can be seen as an element of something greater.

Let me illustrate with an example. When drawing 6 lottery numbers out of 49, subjective chance plays an essential part. Nevertheless, from what goes on in the lottery drum, which is certainly random from a subjective point of view, it cannot be concluded that the whole undertaking, the lottery itself, is meaningless or unplanned.

The chance behaviour of the lottery balls can be explained by such facts as their initial states, their turning speeds, the effects of friction, the number of turns of the drum, the mechanism of final selection etc. Here chance means simply subjective ignorance because of the sheer complexity of the event. But this kind of chance is not opposed to meaningfulness, sense or plan. In fact, it serves as an incentive for participants and as a mechanism

<sup>7</sup> Cfr. Wuketits, F.M.: *Evolution. Die Entwicklung des Lebens*. München 2000.

of distribution to find the winners among the participants. They contribute purposefully hoping for the occasional gains, and at the same time, their contributions ensure the continued existence of the lottery. And every time the lottery-company is the winner. That's the plan behind all of the randomness and through all the randomness.

The fact that a restricted element of chance is built into the total event does in no way lead to the conclusion that the whole undertaking is meaningless, whether it be a lottery or the evolution of life. And whatever chance or randomness means, for a theologian it is always an object of the creation and not the alternative subject to the creator in the way Cardinal Christoph Schönborn suspected.<sup>8</sup>

'Perhaps chance or randomness is that grey-coloured overall or boiler suit God likes to put on if he wants to stay incognito'.

Moreover, man forms part of an evolutionary process which, not having any knowledge of the origin and the end, he only vaguely understands and which he cannot approach from an objective viewpoint. Taking his point of departure from the findings of the natural sciences, all he can do is speculate about the entirety of this process in a philosophically interesting manner. These speculations, however, don't meet the criteria of science in a strict sense any more.

Let me again make use of an analogy. The physical build of birds reflects the laws of aerodynamics, which they 'extract' from the nature which surrounds them without being aware of this process of adaptation. Similarly, the bodies of fish represent the laws of hydrodynamics which again have been extracted from their natural environments, again without any sort of active conscious participation on their part.

In these cases, Man as an external and superior observer is able, in retrospect, to discover a plan in the phylo- and ontogenesis of birds and fish, which as far as we know, they themselves cannot understand although they themselves are the agents in this process.

In a similar way, analogous to birds and fish, Man is unable to survey, discern and understand the way he came into being. He has only a partial view of the biological as well as cultural processes he is involved in. He cannot survey the entirety of these processes from an independent standpoint outside them. His speculations remain extremely uncertain no matter whether he argues as a scientist critical of religion or as a philosopher or a

<sup>8</sup> Cfr. Schönborn, C.: *New York Times* and *International Herald Tribune*. 7. July 2005.

theologian. Both parties – those who suggest there is a design and an ulterior meaning in evolution and those who deny this – are dealing in metaphysics. This is by no means forbidden, but those who do so should themselves be aware of it, and should make others aware of it, too.

An ideologically loaded evolutionary science that makes universal claims that transcend what is quantifiable in an empirical manner, is not what it purports to be, namely a science, but has turned into metaphysics – without knowing it or wanting others to know it.

A type of evolution theory which gives its descriptive terms such as ‘random’ mutation or ‘necessary’ selection or itself as a whole a metaphysical twist or turn, turns away from being a natural science.

The question of whether Man emerges from blind chance and owes his existence to some sort of silly coincidence, or issues from the hands of God (as Dante famously put it) is not a question of scientific certainties, nor is it a matter of vague professions of faith. In any case, it is not a question the sciences can decide, but rather a matter of belief, in favour of which more or less convincing metaphysical answers can be put forward.

### 3. A KIND OF CONCLUSION

We may have a metaphysical option – perhaps we all have one with or without a god – but that is not the truth-keeping extension of certainties given by the sciences. Naturalism is a philosophy, more often than not a metaphysical one, whether we are aware of it or not, but by no means a natural science.

Man with his ‘sense of sense’ is a product of evolution, too. His search for, or longing for, meaningfulness is not something grafted on to the processes of evolution, or imposed on them.<sup>9</sup>

Doubtless Darwin’s theory of evolution, which has considerably been scientifically enhanced to this day, is not only a central theory in biology, but in the natural sciences as a whole. However, those biologists and philosophers<sup>10</sup> who claim it to be a theory with high significance for ethics,

<sup>9</sup> Vgl. Lüke, U.: Religiosität – ein Produkt der Evolution? In Lüke, U.: *Mensch – Natur – Gott. Naturwissenschaftliche Beiträge und theologische Erträge*. Münster 2002, S. 58 – 66.

<sup>10</sup> Vgl. Wuketits, F. M.: Das naturalistische Menschenbild. Der Mensch als Produkt seiner Entstehungsgeschichte. In Klüppel, L. (Hrsg.): *Zufall Mensch? Das Bild des Menschen im Spannungsfeld von Evolution und Schöpfung*. Darmstadt 2007, S. 165 ff. Ganz ähnlich Kantscheider, B.: *Im Innern der Natur. Philosophie und moderne Physik*. Darmstadt 1996.

religion, philosophy, social studies, etc., have changed a good scientific theory into a bad philosophical theory. With such an enlargement resulting in an allegedly not metaphysical hyper-theory including the dogmata of random mutation and reproductive selection, one invents a huge evolutionary myth, which extrapolates the biological results far into the field of the interpretation of the world.

This raises the serious question of whether the evolutionary ideas, as soon as they exceed the boundaries of a biological theory, become metaphysical and are thus, *sit venia verbo*, ‘meta-fusiliered’ as a scientific theory.

For an essentially incarnational religion such as Christianity, it is already implicit in the very idea of incarnation that there will be no conflicts with the biological, evolutionary or socio-biological theories, which are secondary meanings of the primary theological assertion of the creation of the world and the incarnation of God. However, it is equally obvious that theologians will not agree if people, who may be fine biologists but are clueless as far as hermeneutics are concerned, try to exchange the primary assertion for any secondary meaning and vice versa.

Indeed, there is an incontrovertible, solid, and detailed scientific database for a theory of evolution. There is also an elaborate and philosophically refined exegesis of biblical remarks on creation and their philosophical-theological explication.

Between these two there is not the front line of creationism vs. evolutionism with the war report which is presently staged in the media, because neither does the one side have the means to prove God’s existence, nor can the other side rule out that possibility.

Creationists without a historical-critical exegesis and evolutionists without understanding their own reductionist arguments as a kind of more or less hidden metaphysic seem to me like pole-vaulters. The bar is positioned at a height of six meters. They jump four meters under it and think they have cleared the bar because it wasn’t knocked down.

Both the theory of evolution and the theology of creation have to be taken into account for further ideological considerations. On that basis, and not by evading it, it will indeed be possible to develop different philosophical views upon the world based on these identical scientific findings or certainties.

That these views, provided they have an adequate scientific and philosophic basis, will be, may be or even should be controversial – so what?!