

RICHARD DAWKINS' *THE GOD DELUSION*: AN ATHEIST SCIENCE CONFRONTS A SUPERSTITIOUS FAITH

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Abstract

Richard Dawkins' The God Delusion challenges theology to take the method and mandate of science seriously (1 Cor 9:19-23). His argument is based on a naturalistic metaphysic heavily biased against transcendence. Going through various stages of emergence, cosmic evolution has led to a creature faced with options that have consequences and demand accountability. A transcendent frame of reference that provides meaning, criteria of acceptability and authority is indispensable for human life. His theory of evolution is, therefore, deficient in terms of an experiential approach to reality. But it also challenges theology to integrate best science or lose its plausibility. The Christian faith assumes that its notion of God, though provisional, partial and problematic, reflects the self-disclosure of the creative and redemptive intentionality of the ultimate Source and Destiny of reality, the very reality that we experience and which the sciences explore.

Key words: Dawkins' *The God Delusion*, Science and Faith, Evolution and Faith, Emergence and Transcendence

The Problem stated

In his book, *The God Delusion*, Richard Dawkins is engaged in a crusade. "If this book works as I intend, religious readers who open it will be atheists when they put it down. What presumptuous optimism! Of course, dyed-in-the-wool faith-heads are immune to argument, their resistance built up over years of childhood indoctrination using methods that took centuries to mature ..."² That is clear enough.

I am such a faith-head. However, I was not brain-washed as a child, but raised in a 'pagan' environment. I studied natural sciences before I studied theology. As an academic I did most of my research in the interface between faith and social reality.³ I am saddened by the fact that increasing numbers of our contemporaries have abandoned any hope of making sense of the Christian faith. What a difference this faith could make to their lives, to society, to our world! Conversely, Dawkins is exasperated that people living in the 21st century still cling to a pre-scientific, baseless and harmful set of assumptions that cannot possibly compete with the clarity and evidence produced by scientific research.⁴ Moreover, the consequences of convictions can be hair-raising. Think of the Inquisition, Stalinism, Nazism, or militant fundamentalism,

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² Dawkins 2006:5.

³ See for instance, Nürnberger 1998 and 1999.

⁴ In an interview (*Newsweek* October 5, 2009 43), he states that "young-earth creationists who believe that the world is less than 10,000 years old ... are the people that I'm really talking about".

whether Muslim or Christian. Live and let live in an atmosphere of enriching pluralism? Dawkins has nothing but contempt for postmodern relativism.⁵

The struggle for the truth cannot be suspended because too much is at stake. If religion does what Dawkins thinks it does, he certainly has a point. And he is not alone. He formulates in terms of popular science what most scientists and millions of people have come to believe anyway, whether consciously or intuitively.⁶ People in secular societies have long voted with their feet. If you really want to know where the heart of the population beats in modern and postmodern times, go to the gambling, sport and entertainment industries. Christians cannot shake off their responsibility for this kind of situation. That a faith of this profundity and potential impact can be dismissed so readily did not happen by chance. Nor is it necessarily due to the evil motivations of those who have decided to seek true life and fulfilment elsewhere. If our tradition has put obstacles in the way of our witness, it is *we* who have to change our ways.

Must science be atheist? Must faith be superstitious? That is the question I intend to tackle in this essay. Dawkins' answer is a solid Yes. My answer is a solid No. There is no way a believer in God can surrender the reality which the sciences explore to an atheist metaphysic. We must seek a credible Christian response to the spiritual needs of a generation informed by the natural sciences. In this paper I will follow an experiential approach to both science and faith. This is no pretence. I believe that the scientific methodology is valid. I am also persuaded that the evolutionary paradigm provides us with the best set of explanatory tools available at present.⁷

Section I: The closed Universe of Naturalism

There is no question that the Christian notion of God can be delusory. Christians should at least concede that. In fighting a delusory God among Christians, Dawkins may believe that he is fighting the God intended by the biblical witness. He is not. Maybe Dawkins is not the atheist he believes he is? With Einstein he confesses to be "a deeply religious non-believer".⁸ The glories of nature "deserve respect".⁹ "I am calling only supernatural gods delusional".¹⁰ So one only has to read Psalm 104 or Job 38-41 to see that, since very early times, God was deemed the Source and Destiny of precisely the inner-worldly processes and regularities that humans observe and that Dawkins and his fellow scientists investigate. One could argue that Darwin derived atheistic conclusions from empirical observations because of a wrong concept of God – the God who is deemed part of experienced reality.

But for Dawkins this is not an option. Because the natural world is all there is. This is not a scientific, but a metaphysical statement. Dawkins simply takes it for granted that, if God existed, he would have to exist as part of immanent reality, and as such God would

⁵ Dawkins 1998.

⁶ "A host of surveys indicates that what Christians ... today affirm as real fails to generate any conviction among many of those in Europe and in intellectual circles in North America, who seek spiritual insight and who continue regretfully as wistful agnostics in relation to the formulations of traditional religions" (Peacocke and Clayton 2007:5).

⁷ I have applied it to economic reality (*Prosperity, Poverty and Pollution*, London: Zed Books 1999 chapter 13) and to biblical hermeneutics. Nürnberg 2002, chapter 4.

⁸ Dawkins 2006:15.

⁹ Dawkins 2006:11.

¹⁰ Dawkins 2006:15.

have to be an object of scientific study.¹¹ Dawkins does not believe that science is omniscient, but “if science cannot answer some ultimate questions, what makes anybody think that religion can?”¹² Only science can offer valid explanations.

However, a God that is part of immanent reality is not the God intended by the biblical faith, but an idol in the biblical sense of the word. Obviously humankind cannot catch hold of the Source and Destiny of reality and put it under a microscope. Believers should not pretend to know God in the way scientists know how genes or electric currents operate. If God were under our control, he would cease to be God. The transcendent is beyond our reach; otherwise it would not be transcendent.

Does God exist?

The first question then is how we can claim to know anything about God. The second question is what the relation between God and us might be. These are the questions that keep theology breathless. But that is not Dawkins' problem. Dawkins rejects transcendence as such. That is the core of the matter. Based on his metaphysical assumption, Dawkins has to conclude that there is “almost certainly” no God.¹³ This formulation is a concession to the fact that science claims only provisional certainties. But the probability of God's existence is so miniscule, he believes, that it should be ignored.

Believers can be much bolder and say that God quite definitely does not exist – at least not in the sense that other entities within our range of observation, comprehension and control exist. As the transcendent Source and Destiny of experienced reality God cannot be part of that reality. Believers can also say with scientifically informed confidence that transcendence ‘exists’ if defined as the boundary of the range of human observation, comprehension and control. Examples abound. Science cannot tell us why reality exists, where energy comes from and why it follows natural laws that can be expressed in mathematical formulae.¹⁴ Science cannot answer the question of what ought to be. Reality has dimensions that cannot be expressed in terms of empirical evidence, such as value or beauty. Even within its own empirical range of operations science is confronted with more questions than solutions.¹⁵ Dawkins agrees, but he denies that these facts present an argument for God.

Believers can go further and argue that notions of the transcendent do exist as part of experienced reality. That too is self-evident. Dawkins agrees and calls them “memes”, that is, structures in our consciousness.¹⁶ Believers take their particular notions of the transcendent as a reflection, however partial, provisional and problematic, of the self-disclosure of the transcendent. Dawkins denies and ridicules this assumption. Again his naturalist metaphysics determine the argument: If there was such a God and if that God had indeed wanted to reveal himself, he could have revealed himself for all of us to see and finish the argument once and forever.¹⁷

¹¹ “Contrary to Huxley, I shall suggest that the existence of God is a scientific hypothesis like any other ...” (Dawkins 2006:50). “The presence or absence of a creative super-intelligence is unequivocally a scientific question, even it is not in practice – or not yet – a decided one” (Dawkins 2005:58f).

¹² Dawkins 2006:56.

¹³ Dawkins 2006:111ff.

¹⁴ “(We) only know what has happened since the big bang, we cannot determine what happened beforehand ... events before the big bang ... should not form part of a scientific model ...” (Hawking & Mlodinow 2005:69).

¹⁵ “But the existing scientific concepts cover always only a very limited part of reality, and the other part that has not yet been understood is infinite” (Heisenberg 1999:201).

¹⁶ Dawkins 2006:191ff.

¹⁷ “If he existed and chose to reveal it, God himself could clinch the argument, noisily and unequivocally, in his favour” (Dawkins 2006:50).

Dawkins' explanation of Religion

Dawkins attributes the origins of religion to “pressures exerted by natural selection”.¹⁸ However, as Dawkins says, Darwinian evolution is “a miserly accountant” that weeds out anything that does not enhance the survival chances of something or other.¹⁹ If religion were a useless fantasy, Dawkins admits, religion should have been weeded out an awful long time ago. So what is it that has ‘survival value’ and for whom?

What matters in evolution, Dawkins argued earlier, is not the survival of the individual or the species but the gene.²⁰ Dawkins’ preferred candidate for a beneficiary of religion is the religious “meme”, a concept formulated in analogy of his concept of the “selfish gene”. Both the selfish gene and the selfish ‘meme’ are intent on their own survival. But while the human organism needs the gene to exist, the meme does not benefit humans at all. The influenza virus is an apt picture for a selfish parasite that has nothing but nuisance value for its carriers.²¹

This argument is singularly unconvincing. In fact, it is not worthy of a serious scientist.²² Believers do not just believe in any nonsense that comes their way. Notions of the transcendent are indispensable for human life because they fulfil a package of functions that cannot be fulfilled by anything else. Human life requires a **basic frame of reference** that provides a system of meaning, criteria of acceptability, reassurance of belonging and allocations of authority.

The validity of particular human perceptions of the transcendent cannot be demonstrated or proved. That makes them more difficult entities to work with than biological species. But convictions have a shape that can be described, critiqued, transformed or replaced. They have consequences that can enhance and enrich, or cripple and destroy life. If that were not the case, Dawkins would not waste his precious time on religion. But he believes that they are just so much nonsense, “time-consuming, wealth-consuming, hostility provoking ... anti-factual, counter-productive fantasies”.²³

Dawkins wants them replaced with scientific fact. Both parties agree that neither science nor faith can afford to avoid the question of truth. But Dawkins maintains that there is no truth in faith, only in science. His naturalism has become absolute. In this *metaphysical* sense – not as a scientist! – he is a fundamentalist.²⁴ Other naturalists, like Stuart Kauffman or Brian Swimme, appreciate at least the intentions of religious faiths and try to respond to them in their own naturalist way.

Dawkins' Prejudice

Dawkins’ launches a two-pronged attack on religion – the denial of its inherent *plausibility* and the denial of its inherent *morality*. His motive is to discredit faith by any means he can find. But Dawkins’ alternative to religion is not immune to critique. Nor is Dawkins’ osten-

¹⁸ Dawkins 2005:163.

¹⁹ Because religion survived for so long in spite of being counterproductive, it must be “a by-product of something else”, for instance, a misguided consequence of the otherwise important capacity of trust found in children (Dawkins 2005:172ff.).

²⁰ See his famous book with this title 1989. The argument in *The God Delusion* is found on pages 191ff.

²¹ Dawkins 2005:164ff.

²² “The problem is, like other fundamentalists, Dawkins won't stop talking when he's finished talking sense.” Tomkins 2006.

²³ Dawkins 2005:166.

²⁴ Dawkins rejects the insinuation that he is a fundamentalist with contempt: “what I, as a scientist, believe (for example evolution) I believe not because of reading a holy book but because I have studied the evidence” (Dawkins 2006:282ff.).

sibly scientific procedure. When attacking religion at the level of *morality* he focuses almost exclusively on fundamentalist, intolerant, fanatical, legalistic, totalitarian and oppressive examples. Instead of treating these phenomena as what they are, namely ideological, scientifically uninformed, self-seeking or pathological forms of religion, he depicts them as constitutive and typical for religion as such.

He ignores the fact that Christianity is, in spite of its many aberrations, a religion of social justice and loving concern; that the core of the gospel is God's suffering, liberating, transforming and empowering acceptance of the unacceptable; that this gospel marks the transition from enslavement to a pre-formulated and absolutised legal code to the freedom and responsibility of mature adults; that it has had, in countless instances, humanising, liberating, democratising effects on society; that its abuse to legitimate power and privilege is contrary to its very nature.

When attacking religion at the level of *plausibility* he revels in ridiculing the literal interpretation of metaphorical, mythological and legendary forms of speech in biblical theology, such as the virgin birth, as well as the reification of abstract concepts in classical Christian doctrine, such as the Trinity. Instead of emphasising the critical role of theology to overcome obsolete and inappropriate forms of communication, he claims that theology has no subject matter in the first place and should be abandoned as a quest for truth.²⁵ Believers and theologians are, for him, nothing but hypocrites or idiots.²⁶

Conversely he has nothing but praise for atheist Darwinism. He seems to deem science value-free, a position the theory of science has long abandoned. He ignores the fact that naturalism tends to absolutise the human being as the most highly developed creature in the cosmos; that the individualistic interpretation of this absolutized human being has led to the large-scale erosion of family, community, social and ecological responsibility; that the concept of "the survival of the fittest" has legitimated racism, colonialism and imperialism. He does not reflect on the affinity of this principle to Nietzsche's "will to power" and its horrendous translation into the eradication of "life unworthy of living" by the Nazis in Germany. He does not recognise the devastating social and ecological consequences of this principle in neo-liberal economics. He forgets that Marxism-Leninism too claimed to be based solidly on a "scientific" analysis of reality.

I certainly do not claim that these aberrations are part of evolutionary theory. They are not. But if one can distinguish between genuine and aberrant versions of the theory of evolution, one can surely distinguish between genuine and aberrant versions of the Christian faith. Stalin, he believes, was simply evil. Why should an atheist want to wage war or do any harm to anybody?²⁷ Indeed why should he, if there are no other motives! But why then should a believer in a loving God want to wage war or do harm?

He maintains that ethical precepts are a pure consequence of the evolutionary history of the human being and have nothing to do with convictions. For him the emergence and maintenance of altruism is a "blessed, precious mistake", a "misfiring" of the evolutionary process that we treasure.²⁸ But why should such a 'misfiring' be precious, and not pernicious as Nietzsche argued? Does Dawkins draw from a value system that he inherited from some metaphysic other than his Darwinism – perhaps even from Christianity? In sum,

²⁵ Dawkins 2006:56.

²⁶ This statement must be qualified. He has cooperated with bishops (2006:335). In the interview quoted above (*Newsweek* October 5, 2009 43) he says that faith in God and belief in evolution are not incompatible for some sincere scientists, but indeed in his "own mind".

²⁷ Dawkins 2006:278.

²⁸ Dawkins 2005:220f.

Dawkins does not analyse religion with the typical openness of a true scientist but collects phenomena and arguments to support his hostile stance from wherever he can find them. Conversely he highlights only the apparent merits of his own conviction. This black and white depiction is a typical feature of ideological prejudice. It is precisely the way Islamic and Christian fundamentalism, orthodox Marxism-Leninism and Nazism function.

I realise that this brief assessment leaves us with a simplified and distorted impression of Dawkins' true motives. It is not possible to respond adequately to Dawkins' multifaceted argument in an essay of this kind. Nor is that my intention. My aim is, rather, to "account for the hope that is in us" (1 Peter 3:15) in response to Dawkins' challenge. In the next section I try to establish where faith fits into an evolutionary paradigm and whether it is true that faith in God is of necessity irrational and counterproductive.

Section II: The open Universe of Science

The current Scientific World-view

According to the overwhelming consensus among contemporary scientists it all began with the big bang.²⁹ An infinite concentration of energy exploded, causing energy to fly in all directions. The 'law of entropy' says that energy has a tendency to dissipate.³⁰ The emergence of specific entities was triggered by tiny irregularities in the process. These irregularities were amplified by gravity. The attraction between energy concentrations led to the compaction of energy. Compaction led to all the entities found in the cosmos today, from subatomic particles to galaxies and human bodies.³¹

However, due to the law of entropy, all discrepancies in energy concentration tend to balance out. 'Low entropy energy' (ordered and concentrated energy) becomes 'high entropy energy' (disordered and dissipated energy) providing the energy resources that make all processes possible. All entities emerge, evolve, deteriorate and decay, pulling energy out of their environments and dissipating energy into their environments. The entire system is in flux, although the speeds by which particular entities form and disintegrate are vastly different. The pathways also vary immensely. They do not only spread into different directions but also form hierarchies of complexity.³²

A higher level of complexity presupposes the lower levels, but constitutes an entity with novel characteristics. Thus atoms are composed of sub-atomic particles (protons, neutrons and electrons), yet they have entirely different characteristics from those of the elementary particles. We call the transition from a lower level of complexity to a higher one 'emergence'.

Levels of emergence include the following.³³ Waves form sub-atomic particles. Sub-atomic particles form atoms. Atoms form molecules. Molecules combine and reach higher levels of complexity. Amino acids combine to form proteins. Proteins are the building blocks of cells, which are the building blocks of organs, which are the building blocks of organisms. The hierarchy of emergences is characterised by increasing complexity, fragility, volatility and transience.

²⁹ For an accessible overview see Bryson 2003. McCarthy & Rubidge 2005:62 offer a good summary. For the uncertainties see Greene 2005:272ff.

³⁰ The 'law of entropy' was first formulated by Clausius as the second law of thermodynamics. It has since found numerous applications in various academic disciplines suggesting that it is a universal phenomenon. See the article on "entropy" in the Wikipedia on the internet.

³¹ For an introduction to the origins of the earth and life on earth see McCarthy and Rubidge 2005.

³² The most convincing description of the relation between evolution and entropy is found in Sachsse 1984:6ff.

³³ Murphy and Ellis offer a simple hierarchy of the sciences based on levels of complexity: physics, chemistry, biochemistry, botany/zoology/physiology, psychology (1996:19; for detail see 22-38).

Lower levels of organisation are nested in higher levels. One-celled organisms form algae and amoebas. More complex organisms form fungi, animals and plants. Each one of these again spread into a vast variety of different species. Among the animals are mammals to which the human being belongs. The human brain is the most complex organ we know of. It is the seat of personhood.³⁴

Organic differentiation is due to mutations in the genetic information systems that determine processes within cells and the interaction between them. Species that are inherently more capable of adapting to specific environments have an advantage over less adapted ones and become dominant. That is what biological evolution is all about.

Higher Levels of Emergence

We have to distinguish, therefore, between cosmic evolution of reality forming a hierarchy of emergences on the one hand and evolution in various directions at the same level of complexity on the other. The step from inorganic to organic matter is a step in the hierarchy of emergence. The simultaneous existence of cats and dogs is a differentiation at the same level of emergence. Dawkins obviously refers to biological evolution, that is, evolution at the same level of emergence.³⁵

For my argument, cosmic evolution is the crux of the matter. The hierarchy of emergences does not come to a halt at the biological level. The nervous system, culminating in the brain, forms the substratum for a new set of patterns. Instincts, which are hereditary arrangements, and mental conditioning, which is the result of environmental experiences, form the subconscious. Consciousness presupposes the subconscious, but has its own peculiar characteristics.

Consciousness differentiates into various forms and levels of complexity, the peak of which is the human mind, or the personal level of emergence. This level of emergence is characterised by intuition, vision, conviction, volition and agency. Its complexity, volatility and unpredictability surpass those of more simple structures and process such as found in the fields of chemistry or genetics by many orders of magnitude.

Different levels of emergence are characterised by different kinds of regularity.³⁶ The sub-atomic (quantum) level is characterised by probability, the physical level by causality, the chemical level by propensity, the biological level by teleology,³⁷ the instinctual level by flexible responses to environmental challenges, the personal level by intentionality.

Intentionality is found only at the personal level of emergence. A plethora of other features characterise personhood, some of which are also present in higher animals. Examples are observation, comprehension and communication. Human comprehension is aware of sequences in time (thus history), regularities in space (thus abstract thought) and energy differentials (thus power struggles). Human communication uses complex systems of symbols expressed by sounds and signs called language.

The human mind is the most complex phenomenon found in reality that we know of. It is also the most subtle, the most versatile, and the most unstable. To appreciate that, com-

³⁴ The human brain "has about a hundred thousand billion synaptic switches, and the number of states in which it can exist greatly exceeds the number of atoms in the universe". Barrett 2000:120 (pasted insert).

³⁵ An introduction to the theory of evolution can be found in Guttman 2005.

³⁶ "As the parameters are changed, a system can pass from simple regular behaviour that repeats itself exactly to the highly complex non-repetitive irregular behaviour described (by chaos theory) as chaotic" (Barrett 2000:120).

³⁷ I do not refer to the Aristotelian concept of teleology according to which the form seeks perfection, but to the fact that living beings are programmed by evolution to seek survival, well-being and avoidance of pain.

pare human thoughts successively with chemical elements, stones, trees and ants. One has to realise, however, that the personal level of emergence presupposes, and depends on, the entire hierarchy of infra-personal levels of emergence. It is also embedded in the supra-personal level of social structures and processes.

So the human being is also determined by probability, causality, propensity, teleology and instinctual conditioning at the infra-, and supra-personal levels of emergence. This phenomenon is called 'upward causation'. However, humans also have the capacity to deliberately impact the infra-, and supra-personal levels of emergence. We call this top-down causation.³⁸ How does it work in practice?

Intentionality and Agency

Every single moment is the starting point of a process that moves into the future. It is characterised by high "sensitivity to initial conditions", as chaos-theory puts it. Tiny variations at the beginning of a process can lead to vastly different outcomes.³⁹ I call realised options 'switches', a metaphor taken from the railways. Humans become aware of options as reality moves into the future, anticipate their possible consequences and try to let beneficial options materialise.

Some options are saddled with obstructive factors, some privileged with supportive factors. In situations of sensitivity to initial conditions the human mind is capable of mobilising forces provided by the sub-personal levels of emergence, such as physical or biological energy, to throw the switch into a desired direction. This is called 'free will'.⁴⁰

Free will cannot mean, therefore, that the human being is capable of overriding the regularities at lower levels of complexity, for instance causality. But it is capable of utilising these regularities to channel processes in desired directions at junctures of sensitivity to initial conditions. We call this capacity agency. When taking conscious or unconscious decisions, humans impact the direction of the world process as a whole.

Transcendence is an Inescapable Part of Human Experience

Science is important but not sufficient to explain and underpin human life. While all living beings are programmed to choose survival, well-being and the avoidance of pain, humans have a heightened sense of apprehension. There are trends in reality that are clearly undesirable. Do they have a hidden purpose? What should we do about them? Are we entitled to interfere? Moreover, most of these trends are beyond human control. Where will they lead us? What will be their consequences?

Science utilises its knowledge of regularities to extrapolate current trends into the future, but in the first place its power of prediction is severely limited. Humans have no choice but to fall back on intuitions and traditions that seek to determine a system of coordinates covering the whole of experienced reality. They are consolidated in the form of systems of meaning. Systems of meaning define one's identity within the concentric contexts of the whole of reality: body, community, society, the earth, the cosmos.

Second, science is restricted to an analysis of what reality has become. It has no means

³⁸ Murphy and Ellis 1996:24ff.

³⁹ For of chaos-theory in theological perspective see Russel, Murphy and Peacocke (eds) 1995.

⁴⁰ "A cosmic trajectory, which had its origins in what seems to have been mere physical movement or vibration, has ... gradually developed increasing directionality, ultimately creating a context within which deliberate purposive action could emerge and flourish" (Kaufman 2004:46). The unavoidability of freedom rests in the fact that freedom itself has emerged from a causal process that was impersonal, highly determined as it unfolded, and ... much less complex and sophisticated than that which emerged from it" (Hefner 1993:97).

to determine what reality *ought* to become. Humans have no choice – they must find answers to such questions.⁴¹ They are provided by visions, values, norms, goals, social conventions and sanctions. When internalised, such criteria give rise to conscience, solidarity, commitment and dedication. They grant or withhold a sense of acceptability without which humans cannot live.

Third, acceptability takes the form of authority to be, to think and to act within their parameters of acceptability. They allocate certain statuses and roles. This is often done in the form of rituals. Without explicit or implicit confirmation of one's authority, humans become insecure, anxious, lethargic or fatalistic. Again science cannot allocate such an authority.

These three dimensions of human existence consolidate into packages of assumptions that are based not on evidence but on conviction. Convictions are not invented. They have emerged and evolved in history in response to experienced needs. They impress their validity on human consciousness. They can be informed, extended and corrected by scientific insight, but scientific insight itself is embedded in frames of reference and struggles to find a valid overall system of meaning.⁴²

This is the area of human experience where faith is located. The concept of God is a name for the ultimate reference point of a system of meaning that defines identity, posits criteria of acceptability and allocates authority. The phenomenon that Dawkins calls 'memes' is not, as he presumes, a product of human fantasy gone wild. It is an essential part of experienced reality. As such it can belong to two different levels of emergence. On the one hand it can indicate the conditioning of our subconscious due to genetic determination or environmental impact. The hard wiring of our brain cells provides the biological infrastructure of such a conditioning. Alternatively 'memes' can refer to ideas, conceptions and convictions at the personal level.

Convictions are also not free-floating irrationalities that follow mechanical laws of replication, as Dawkins assumes, but serve particular functions. The multiplicity and relativity of concepts of the transcendent is no argument against the phenomenon as such, just as the evolution of different species is not an argument against biological reality. To use a picture: our earth is just a speck of dust in an infinitely large universe. There are other such planets. But without its power of gravity we would be like astronauts detached from their space ship drifting into outer space without orientation or impact on anything whatsoever.

As mentioned above, the transcendent as such is inaccessible; otherwise it would not be the transcendent. However, concepts of the transcendent are part of immanent reality. They can be described, evaluated, critiqued, transformed or abandoned. This critical and constructive process is of highest possible significance for individual human existence, community, society, humanity and nature. It will determine whether humankind and life on earth will have a future and what kind of future it will be. Both Dawkins and his creationist opponents are engaged in this struggle. It cannot be avoided or suspended.

Are Convictions Spurious?

The area of concepts of the transcendent constitutes the most differentiated, complex, volatile and fleeting of all levels of emergence. Physics and chemistry deal with levels of emergence that are, by comparison, simple and predictable. Biology deals with more complicated areas but it is still accessible to observation, comprehension and control. What hap-

⁴¹ "For humans are condemned to choose, and to interpret the world so as to choose better." Cahoon 1988:231.

⁴² According to Kuhn (1970) the sciences have always been embedded in changing frames of reference. But that does not mean that there is no progress of insight.

pens in the human mind is infinitely more complex, volatile and unpredictable. But it is this level that defines what it means to be a human being.

When biologists like Dawkins ridicule those who try to understand transcendence, determine ultimate reference points, construct systems of meaning, establish their potential consequences in certain situations, sort out the desirability of certain outcomes and allocate authority to act within these parameters, it must be asked whether they do so out of ignorance or arrogance. They too have no choice but to presuppose a system of meaning.

That does not mean, of course, that all convictions provide valid interpretations of what reality has become, valid visions of what reality ought to become, thus valid criteria of acceptability and valid motivations to act. This is precisely the level at which philosophies, ideologies and theologies struggle to obtain clarity and plausibility.

Dawkins also dabbles in this area, but he does exactly that – he dabbles. I agree that systems of meaning and ethical precepts are human constructs that undergo a process of evolution in response to environmental challenges.⁴³ That is not in dispute. But his interpretation of this phenomenon is uninformed and naïve. People like Hitler and Stalin, he believes, were simply evil and their behaviour had nothing to do with their convictions.

I do not have the impression that Dawkins has a very good idea of how ideology originates and how it works – let alone genuine conviction. Why did Hitler manage to carry millions of normal Germans with him? Just through infection by a disinterested mental virus? Why did supposedly rational people lose their lives and belongings for the success of the Marxist-Leninist revolution? Why did Albert Schweitzer, a celebrated theologian, philosopher and organist, start all over, study medicine and invest his precious life time in the jungles of Central Africa?

He further believes in the relatively uniform evolution of ethical awareness in the direction of more acceptable forms of ethical behaviour right across humanity. He has no idea of the multiplicity and variety of social, cultural and religious formations, their existential consequences, their impact on the structures and processes of society and the devastations their clash with modernity can wreak.⁴⁴

Dawkins' contentions may contain elements of truth. Yet they also show that a competent and famous biologist cannot necessarily be trusted to understand what happens at other levels of emergence, whether lower down in quantum cosmology or higher up in the area of human assumptions, visions and empowerments.

Section III: Christian Faith within an Experiential Framework

Scientists are methodological ascetics: they deal with immanent reality, not with transcendence. They require evidence, mathematical rigour or plausible conjecture. But that does not mean that the universe they are dealing with must be closed in upon itself. On the contrary, the profound uncertainties and openness of the sciences make such a closure questionable.

Conversely critical theology has known for a long time that the existence and character of the transcendent cannot be established through empirical evidence, reason or conjecture.⁴⁵ Like everything else in reality, concepts of the transcendent have emerged and evolved in human history. Biblical traditions came about through a series of redemptive responses to changing situations, needs and interpretations. They are subject to analysis, critique and revision.

⁴³ Dawkins 2005:200f.

⁴⁴ For an example see Nürnberg 2007, chapter 5.

⁴⁵ Dawkins' deconstruction of the proofs for the existence of God (2006:75ff) are hopelessly out of date.

Theology is a constant struggle to find more appropriate perceptions of the transcendent. It is critically important that the transcendent is conceptualised as the transcendent dimension of immanent reality.⁴⁶ It may not make unwarranted claims, indulge in speculations, become superstitious, or engage in fantasy. If God is the ultimate Source and Destiny of the reality we experience, our concept of God must integrate the insights of 'best science'.

Responsible faith is realistic. It does not know more about how the universe came into being and how it is put together than science. It only relates the reality we experience and the sciences explore to its ultimate Source and Destiny. The Bible is not a scientific textbook that offers information or explanations concerning the origins and functions of experienced reality. As Dawkins points out, people who lived two or three millennia ago could not possibly have come up with better explanations of physical and biological reality than contemporary scientists.

To becoming a scientist to the scientists, theology must follow an experiential approach to reality. First, we can speak of God only in metaphors, but we must not confuse the metaphor with what it refers to. Father, Son and Spirit are such metaphors. Second, scientists have no antenna for Platonic abstractions and metaphysical constructions. Third, we must focus on the observed object, as science does, rather than the observing subject, as philosophical epistemology does. Fourth, we must avoid a postmodern relativism that denies fact and validity.

We have seen that evolution has produced a creature that cannot live without *meaning* (orientation, validity, authenticity), *legitimacy* (acceptability) and *authority* to act (status and role). This is fact, not fantasy. Trees, fish and antelopes do not have to bother about street children, ruthless dictators or an ecological crisis. They simply function. But when human beings lose their bearings, they may turn into monsters, couch potatoes or suicide candidates. Scrap divine intentionality and you have absolutised human intentionality, classically described by Ludwig Feuerbach and Friedrich Nietzsche.

Human self-absolutisation is self-deceit. We are not self-generated, self-sustaining and self-responsible. We owe our existence to an infinite network of processes that goes back at least as far back as the big bang. We are keenly aware of our vulnerability, the vicissitudes of an unpredictable fate and our need for reassurance. Our consciousness demands authentic lives, exposes our failures and our need for forgiveness and reconciliation. We know that hope keeps human life ticking in the face of meaninglessness and futility. These are simple facts of life.

Christians assume that these facts are rooted in an overarching creative and benevolent intentionality they call God. They relate to it in personal terms. They entrust themselves to God's creative power and redeeming love. The assurance of God's benevolence translates into a vision of comprehensive well-being. This vision guides their behaviour in the direction of the most life enhancing options available under any given set of circumstances.⁴⁷

These are manifestations of faith. They are not self-evident. Dawkins is right when he demands that they be accounted for. In terms of experiential realism the proclamation that God, the Source and Destiny of reality, is unconditionally for us and with us and not against us is not an analytical or descriptive statement, but a performative statement. It creates what it says in the consciousness of the believer. Yet it is not arbitrary. It emerged and evolved in the history of Israel that culminated in the Christ-event. All human insights, including scientific insights, emerge, evolve and travel through time and space in the form of traditions.

⁴⁶ "God is "the One who is the creative ground of all that is. (Believers) must, therefore, take into account all that we have learned about the variety of the world..." (Polkinghorne 1996:1).

⁴⁷ The 'moral nature' of the universe (Murphy and Ellis 1996), presupposes the vantage point of faith.

The performative statements that provide such reassurances and challenges can indeed be irrational and misleading. That is why they must be subjected to critique. A transcendent frame of reference must be judged by the quality of its consequences. The question is not, as Dawkins assumes, whether God exists. The question is what the 'God' to whom we entrust our lives *does to us*. Christians experience its convicting, liberating and motivating power and ascribe it to the self-disclosure of God's intentionality in Christ. These facets of the Christian faith are neither atrocious nor irrational. Selfishness, hopelessness, lethargy, boredom, cynicism and cruelty are not preferable alternatives, nor does Dawkins claim them to be.

Some humanists and naturalists may indeed be more loving than most Christians. There is no guarantee that believers will perform better than atheists. As the history of Christianity amply demonstrates, they can be misguided, selfish, ethnocentric, short-sighted, power hungry, greedy, insincere, and hypocritical. What can be said with confidence, however, is that such attitudes are aberrations in terms of the faith spawned by Jesus of Nazareth. This is not necessarily and intrinsically the case with all other convictions and commitments, including those propagated by Osama bin Laden, Nietzsche, Adam Smith or Dawkins for that matter.

Aberrations apart, the biblical faith has picked up some intractable impasses and cul-de-sacs on its evolutionary journey. To retain or regain its credibility these must be acknowledged and overcome. Throughout its long history the biblical faith has been re-conceptualised in response to new insights and challenges, often quite dramatically.⁴⁸ We must do for our times what the biblical authors did for theirs. The insights of modern science can help us find more credible expressions of our basic convictions. Unfortunately the constraints of a journal article prevent us from going into detail.

Conclusion

In sum, faith must listen to its critics. It must be open to transformation. If faith persists with obsolete frames of reference, spurious assumptions, inappropriate formulations and problematic patterns of behaviour it cannot respond creatively and redemptively to the needs of its time. Dawkins's work presents a truncated analysis of experienced reality and offers a deficient alternative to faith. But it challenges us to find expressions of this faith that are credible for our contemporaries.

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⁴⁸ See Nürnberg 2004 chapters 2 and 3 for detail.

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