

Why religious human beings need evolutionary epistemology! A theological and evolutionary viewpoint of ‘why humans need to embrace evolutionary epistemology’

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I put forward an understanding of evolutionary epistemology that rescues something of the old and venerable idea of freedom, and it means that we as theologians should grasp our very nature realistically, beyond any illusionism and utopian dreams. The author feels that scholars, especially theologians, should firstly take evolution seriously and secondly regard evolutionary epistemology as important as evolution itself, the reason being theologians should know that it is of paramount importance for their systematic-theological intradisciplinary and/or interdisciplinary implications, which is embarking on a way of thinking that regards evolutionary epistemology as a friend in their accommodation of their respective theological fields of interest. This accommodation is substantial as it will enhance their respective theological disciplines as ‘an exhilarating vision of God’. Evolutionary epistemology takes a pragmatic view of humans. Evolutionary epistemologists question how humans really behave and what the true origin of their behaviour is. In contrast to this programme, many conceptions of humans are based on an idealisation of our species.

Intradisciplinary and/or interdisciplinary implications: Evolutionary epistemology takes a pragmatic view of humans. Evolutionary epistemologists question how humans really behave and what the true origin of their behaviour is. In contrast to this programme, many conceptions of humans are based on an idealisation of our species. I then put forward my own understanding of evolutionary epistemology and conclude that evolutionary epistemology rescues something of the old and venerable idea of freedom, and it means that we should grasp our very nature realistically, beyond any illusionism and utopian dreams.

Introduction

Most people that I know, except for a few scholars that I have worked with over the past 10 years, would be angry with me over the concept of evolutionary epistemology, stating that human beings need evolutionary epistemology. Even more so when I dare to say that God needs humans¹ to understand evolution, with an epistemic throw-down within an evolutionary progress. I can hear them murmur to themselves: ‘Humans just need God and defiantly not an understanding of evolutionary epistemology’. Could I be wrong? Your answer to this question will indicate how you as scholar experience this question.

However, through this article, I would like to emphasise the exact opposite. Especially when I say humans need God to fuel their righteousness in being compassionate humans, particularly because God regards humans as the most important asset and vice versa, with humans considering God as a compassionate and caring God; theology must accept that evolutionary science has changed our understanding of the world dramatically, and so any sense we may have of a God who creates and cares for this world must take into account what Darwin and his followers have told us about it.

To me the problem originates when many of Darwin’s scientific descendants as well as some ancient and contemporary theologians (long afterwards), instead of taking his widening of the world’s horizons as a springboard to more exhilarating visions of God,² have seen and decided that

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1. In my referring to the term human(s) in this sentence as well as the context of this article, I am specifically referring firstly to theologians, my object, and secondly, religious humans, my subject for alignment.

2. Meaning that when one understands and thus projects a better understanding of evolutionary epistemology, one will certainly find your vision of God more exhilarating, as I am convinced that evolutionary epistemology enhances the believer’s epistemic context into an agreement that our religious beliefs have evolutionary origins and that they were established by mechanisms working reliably in the world of our ancestors, which underlines the very basic characteristic of any living organism. This being said, I would like to give an example from my own personal belief-gaining process:

evolution is to be the final defeat of theism. As Haught (2000: ix) puts it mildly: 'Theology has generally failed to think about God in a manner proportionate to the opulence of evolution', as I am convinced that theology has the resources to do so. In the following pages, I shall attempt to set some facets of a theology for epistemic evolution that can only emerge from humans. However, before I continue, I would like to emphasise that, for me, it will be impossible to do precisely this because of the lack of time and space to touch on every concept and aspect of evolutionary epistemology as to why humans and thus also God need it so badly.

What do I mean when I speak of evolutionary epistemology?

Evolutionary epistemology reveals the process of evolution as a belief-gaining process, a process that in humans, too, is shaped pre-consciously. All our beliefs, and I would argue that our religious beliefs, thus have evolutionary origins that were established by mechanisms working reliably in the world of our ancestors. This still does not mean, however, 'that the theory of evolution by natural selection can offer an adequate explanation for beliefs that far transcend their biological origins' (Van Huyssteen 1998:151).

It underlines the brute fact that cognition, in a common sense of the word, is a common characteristic of any living organism. Therefore, it underlines human rationality only when it is understood against the background of how human's biological existential characteristics are understood. Van Huyssteen (1998) explains:

Precisely this important point has also been argued by Henry Plotkin, who has shown that there is a clear evolutionary link between evolution on a genetic level and the evolution of our intellectual and rational capacities. (p. 152)

Therefore, to understand a relationship can only be a necessity in any reduced sense of our understanding of our self.

Our rational expectancy or ability is to regard it as part of our evolutionary process through natural selection, but it is prominent that it cannot be understood as all inclusive. Again Van Huyssteen (1998):

evolutionary epistemology breaks through the traditional modernist subject-object polarization and reveals the basis for a postfoundationalist epistemology by showing, first, that all cognition is a function of active systems that relationally interact with their environments, second, that cognitive capacities are the result of these interactions between organisms and their environments and these interactions have a long evolutionary history; and third, that cognition is a process that is not to be

(footnote 2 continues...)

When I realized, many years ago, that evolution is a fact, a brute fact, so to speak, I had many questions answered in my own mind of experiencing religious experiences, especially in nature and in dealing with humans, which was contrary to what I had learned since childhood. Why? Because, and in a modest vast retrospection of thoughts, I had to make up my own mind (that includes my own contexts, critique and communication), as I sensed an intuitive affective-cognitive realization that enhanced my faith as I now could enjoy God and then in my own context see Christ as an evolutionary Being and human. And therein lies my 'exhilarating vision of God'. For others?, it can or it cannot be ...

described as an endless, accumulative chain of adaptations building on one certain foundation, but rather as a complex interactive process in which we move beyond our biological roots without ever losing touch with them. (p. 152)

It is clear that human knowledge is embraced with biological factors, but the dependency of cultural conceptuality must never be underestimated. These epistemic interactions between cultural and biological definiteness of human's epistemic wisdom transcend our so-called rationale, and in trueness of our genetic vulnerability; it is therefore of utmost importance in human's understanding in trying to accept their own interdisciplinary contexts, before they embark on the difficult journey to understand this duality of complexity as they are intuitively construed to make ethical decisions with regard to their religious experiences. The question is: how can we as Christian theologians entertain our longing for religion within the package deal of an evolutionary scientific fact?

I retrace the question: How do we as Christian theologians entertain both our religious longing for God and our own evolution process as a scientific fact?

Although this article is a Christian theologian's appreciation of evolutionary science, it will approach the topic with an eye on other religious outlooks as well. Since for many scientists today evolution clearly implies a meaningless universe, all religions must be concerned about it. Evolutionists raise questions not only about the Christian God but also of notions of ultimate reality or cosmic meaning, as many of the world's religions understand these other religious traditions. Haught (2000) portrays it like this:

If they (other religions) look closely at its contemporary scientific presentations, Jews, Muslims, Hindus, Buddhists, native peoples, and others as well, they would see that evolution is a shock to the belief systems. (p. 9)

Almost all religions, and not just Christianity, have envisaged the cosmos as the expression of a transcending order, wisdom or rightness, rather than an irreversibly evolving process. Most religions have held that there is some unfathomable point to the universe, and that the cosmos is pinned by meaning over which we can have no rational intellectual control, and to which we must in the end surrender humbly.

Long ago, even sacred traditions have held consistently that the cosmos is here for a reason, even though they do not know, specifically, what that reason ought to be. Humans of faith, all faiths, have to wonder if their venerable teachings can honestly survive evolutionary portrayals of open-endedness of nature, humanity, ethics and religion. The keyword here is honestly, 'for there is no question that religions still endure, and in some cases thrive, in most parts of the Earth' (Haught 2000:10). I think that all religious communities must give these questions much more attention

than what is currently dedicated. As an example: what would religious humans think about their central teachings, about the existence of a transcended principle of meaning, or cognisance of evolution? Alternatively, even more daring is the authority of their moral codes, especially now that Darwinian science is experiencing such a vigorous renewal in the contemporary intellectual world.

It is my opinion that any religious human, if they are truly integrity driven, must take cognisance of the updated evolutionary epistemic interpretations of life, language, behaviour and morality. Even religion has lately been gaining unprecedented acceptance by natural scientists, philosophers, linguists, ethicists, social scientists and more recently the medical community. What does it tell you as a religious human? It tells you that for Darwin's evolutionary science to be true, as we now know it is, it ought to place a serious doubt on religion and therefore our (human) quests for purposeful meaning for our universe. It could be a dangerous idea.

Darwin's dangerous idea

According to the prolific American philosopher Daniel Dennett, Darwin's theory of evolution by natural selection is a dangerous idea. Dangerous as it is threatening to religious humans because it wrecks any hope that the universe is there for a reason. Unfortunately, the current church with its Christian custodianship refuses to look squarely at this so-called dangerous idea. Why is that the case? Why does it seem to be true of our own Christian theologians? I think it has to do with the notion that biological evolution is commonly regarded as an inherently meaningless process. Some scientists argue that life on Earth requires nothing more than pure random genetic mutations, the deterministic laws of natural selection and enormous spans of time. Moreover, many Christian theologians still propagate that God created Earth without the open-endedness of evolution. For me it is clear-cut that Christian theologians have not examined it closely enough or else they would have abandoned their trade long ago. Nevertheless, annoyingly, even many scientists carry on as though Darwin had not completely pulverised their pictures of an intelligently governed universe. Here I stop the bus. Here I cannot concur with Dennett as he strongly suggests that evolution explains all possibilities that are logically endowed to determine life: 'Mathematically speaking Dennett goes on, evolution takes place in an open-endedness Design Space comprised of all the logically possible forms of life'. In quoting this in an appendix thereof, Haught (2000:12) explains that: 'Dennett meanders through virtual archives containing every conceivable arrangement of DNA, segments of which we call genes'.

As far as I understand it, Dennett takes the genetic combinations of Mendel's library and toys with countless possibilities until it changes upon those that actually work. This workable or fit genetic combination, I think Dennett suggests, happens to be adaptive to their environment and thus able by way of living organisms that unknowingly transport them, to survive and reproduce.

A further frustration of mine is Dennett's suggestion that selection of minute adaptive changes in organisms over a period of several billion years is a totally blind process of open-ended evolution and can bring about all the diversity of life on our planet, including beings endowed with sight, wisdom and consciousness. Although Haught (2000:12) does not mention it, I do think he (Dennett) incorporates the unconsciousness with this as well.

Dennett's depiction of evolution follows closely that of the well-known British zoologist Richard Dawkins. In *The Blind Watchmaker* and in *River out of Eden*, as well as *Climbing Mount Improbable*, Dawkins argued that the blind chance and natural selection working over long periods of time can account for life's creativity all by themselves.³ For the sake of coming to my conclusion at the end of this article, Dawkins (Haught 2000) then says the following:

that such a picture, is not a recipe for happiness. So long as DNA is passed on, it does not matter who or what gets hurt in the process.... genes don't care about suffering, because they don't care about anything. (p.13)

Therefore, maximisation of the utility function of DNA survival can account for all the outcomes of evolution. Here Dawkins is specifically referring to *The Selfish Gene* as written by him in 1976 (Dawkins 1976). My own discomfort with this remark has probably to do with the fact that I am certain that in his referring to the selfish gene he is actually referring to the meme. I believe this, because under the heading *The Invention of the Meme* in *The Selfish Gene*, he without qualification interpreted Weismann's demarcation illegally. Dawkins (un)- or perhaps knowingly presumes that the nexus of biologic evolution is nothing other than differential reproductions. That raises the question of: is evolution to be regarded and understood as a competitive dynamic between linear self-manufacturing process entities? It is here where I think Dawkins has erred in his argument. He makes a metaphysical description to a physical reality. Alternatively, stated the other way around, he pretends that his metaphysical reality is a gene=meme, and to me this is nothing other than biological fundamentalism.

I also took cognisance of the different debates that are available on the Internet between Dawkins and Alister McGrath, where they discussed the opposed book to the *God Delusion* by Dawkins, from McGrath: the *Dawkins Delusion*. Again, because of the lack of time and space, I will not dwell on these discussions in detail but would rather allude to this as it concerns me in the context of this article, and thereby my decision of not dealing with these discussions in full may be comprehended.⁴ They talked about the rationality of faith. Is reason relevant? They even touch upon probabilities and non-probabilities, which is a huge discussion in itself.

3. Richard Dawkins, *The Blind Watchmaker* (1996, New York: W. W. Norton); *River out of Eden* (1995, New York: Basic Books) and *Climbing Mount Improbable* (1996, New York: W.W. Norton).

4. The following debates are relevant: Dawkins and Williams, McGrath and/or Chopra that can be viewed on <https://www.youtube.com/watch?v=3LGm0iWPC80>

Also, Dawkins is frequently making mention of his own intuitiveness as to why he says *this* or *that* as an Atheist. To me, this in itself is metaphysical as he talks about non-rational cognitive as well as affective existential entities without clarification. Here I stand before Dawkins and can only humbly state: 'I believe intuitively in Jesus Christ as my God'. What it really means, or alludes to, here is neither irrelevant for not believing in a *Bigger Being* nor does it make one's opinion intuitively sounder either way. In this discussion, they (McGrath and Dawkins) touch upon various intrinsic basic as well as profound rationally difficult scenarios of what God can or ought to be.

I have mentioned that certain scientists (Dennett and Dawkins) are 'missing the point', so to speak. The point being that evolutionary epistemology used correctly could have helped the aforementioned scientists' sometimes profound robust quest in eliminating a *Bigger Being* in the open-endedness of evolution, or to put it more bluntly: our God who we believe is still in command of such a process. To give this notion of mine more emphasis, I am going to seek the help of science's 'blood-brother', technology, and its remarkable so-called oversight and interdisciplinary cross-polytonal interventions in my stressing the obvious about epistemology's reliability in our understanding of ourselves within an open-ended process of evolution. I am making use of a doctoral thesis submitted by me in (2014) titled: *DIE DERDE DISKOERS: 'n Sisteaties-teologiese verantwoording van 'n epistemologiese perspektief ten opsigte van die teologie-wetenskap dialoog* with the University of Pretoria, South Africa.

Logo-centrism, the 'blood-brother' of science

The cognitive crisis resulting from postmodernism can commonly be viewed in the form of human being's inability to keep up with the contemporary world's technological reality. This 'not-keeping-up' has to do with two very important eventualities; firstly, the non-management of the great expectations of what technology presumes. Secondly, it leads precisely to the impecunious thinking that all forms of philosophical rationality are relevant to the deconstructive critique emerging from a Western logo-centrism.⁵ The socio-economic crisis reflects the inability of both capitalistic and socialistic systems to its anticipation of a post-industrial period, and it ought to be handled with integrity. This chosen integrity can be perceived through a few examples, of which I will discuss two.

Firstly, as the British particle physicist and current Christian theologian John Polkinghorne (2006) states in *Why the Science and Religion Dialogue matters?*:

5. Logo-centrism is a German term that was coined by Ludwig Klages, a German philosopher, in the 1920s. It refers obliquely to the tradition of the Western science that refers to the word *logos* as the word or the *unity of action* where the spoken word is regarded as epistemically elevated in a system or structure whereby humans can only receive theological reflection through means of logo-centrism in their contemporary world. It is therefore necessary, if humans want to fully understand this structural nobleness, that they must make sure that an original, non-reductionist object as the *logos* will be able to represent any human presence in the inescapable mediated contemporary world of today (Van Rooyen 2014:19).

But that would be to confuse science with its lusty offspring (blood-brother), technology. The latter takes the discoveries of science and uses them to produce inventions. Technology is about getting things done, but science itself is concerned with something different. Its goal is not power, but understanding. Doing scientific research is hard work. The reason scientists stick at it is that they want to understand the world. (p. 26)

Polkinghorne (2006) alludes to loco-centrism as he details the first instance of how science misconstrued its association with technology (logo-centrism) when he explains:

Yet we all know that there are other great swaths of human encounters, with reality that fall outside these limits. There is the realm of the personal, where our meeting is with a *Thou* rather than an *it*. In this sphere of experience, testing has to give way to trusting. If I am always setting little traps to see if you are my friend, one shall soon destroy the possibility of friendship between us. In the realm of the personal, all moments of experience are unique, for their quality is unrepeatably. (p. 27)

Polkinghorne (2006:28) goes further and explains it through the following example: 'We never hear Beethoven quartet the same way twice, even if we replay the same disc'. To me it suggests that the integrity that I allude to in this context, where technology as logo-centrism is wrongly misused by science, is manifested because of the fact that no fixed criteria of how logo-centrism should or could be understood is viable in a human's way in which he or she will react to it. How humans construe technology unfortunately brings most people to God. Or so they want to believe!

Some researchers imply that logo-centrism may not be something which exists across all cultures but instead has a particular bias in Western culture. Tedlock's (1979) study of stories in the Quiché Maya culture leads him to suggest that the development of alphabetic writing systems may have led to a logo-centric perspective, but this is not the case in all writing systems, and is particularly less prevalent in cultures where writing has not been established.⁶

This brings me to God, Humanity and the Cosmos with theology and psychology as partners. The reason for discussing God, Humanity and the Cosmos in the context of theology and psychology as partners has to do with the dialogue between theology and psychology that seems to be in an unbalanced state of reality. The dialogue between psychology and theology seems to be one-sided. We as theologians are more concerned with what the psychologist has to say than they about us. I will try to answer this inequality in the context of my main aim in this article: 'why religious humans, and thus also God, need evolutionary epistemology?'

6. In a further reflection of logo-centrism in the Western culture, Tedlock (1979:322) writes: 'The voice is linear, in Derrida's view, there is only one thing happening at a time, a sequence of phonemes, and this is reflected in writing and even the study of language in the field of linguistics (and what Tedlock calls mythologist or larger-scale structuralism), are founded not upon a multidimensional apprehension of the multidimensional voice, but upon uni-linear writing of the smallest-scale articulations within the voice'. This one dimensionality of writing means that only words can be represented through alphabetic writing, and more often than not, tone, voice, accent, and style are difficult, if not impossible, to represent!

The unbalanced state of reality between theology and psychology

Fraser Watts (2005) makes the following, to my mind, very true statement:

It is essential to make a distinction between what is really established by scientific research in psychology, and what is sometimes claimed by way of extrapolation from that research in psychology, and what is sometimes claimed by way of research findings in psychology that conflict with religious belief. (p. 193)

This implies that there are limits to what psychology can properly depict, but there are two different ways of setting out such limits. One is to divide the territory and say that here are some things that psychology can study and the other is to leave to theological things that are outside the scope of psychology. There are humans who I personally know who would like to see morality, aesthetics and religion itself being regarded outside the scope of psychology. I reject this view. There is definitely a very valuable psychology of religion, morality and aesthetics and religion itself. However, I do claim that psychology never exhausts all there is to be said about what it is studying. There are two things to be said from other points of view. It is in that sense that psychology is inherently limited. Let me explain: The dialogue between psychology and theology falls into two main areas: the first is concerned with human nature generally and the second is concerned with religion.⁷

Perspective on human nature

It is incompatible with the religious view of human nature to take a very reductive view of human beings. Such reductive views of religious human beings arise at various points in psychology, and these points are often expressed in nothing but language. For example, the question arises of what, if anything, is at stake theologically in the attempt to explain consciousness in terms of the brain. As Watts (2005:196) reflects positively: 'The assumption that human beings have distinctive attributes is as compatible with the investigation of their neurological basis as it is the study of their evolutionary origin'. Watts (2005:196) elaborates further: 'In the course of evolution, new attributes can and do arise who are both natural and spiritual'. 'We are therefore capable of entering into a conscious relationship with the God from whom the natural order itself arose'. In Christianity, it is my belief, we are spiritual creatures, in a precise way *why* and *how* we are made in the image of God (*imago-Dei*). We thus may have a conscious relationship with God and therefore we do not have any reason to deny that we are also natural creatures.

The mind and brain sciences have been emphasising the close intertwining of mind and brain. As Watts (2005) puts it adequately:

They are not two different things, but rather two different aspects of the same thing. We do not have any experience, which is purely mental in the sense that the physical brain is not also

7.Or, as some psychologists and psychiatrists refer to: 'the spiritual attribute'.

involved; all experience is under-pinned by the human brain. This also applies to our experience of God, which must be linked to brain processes as much as any other kind of experience. (p. 196)

Here one can clearly see why epistemology, especially evolutionary epistemology, is so important for human beings who are inclined to be religious. This brings me to the psychological approaches to religion.

Psychological approaches to religion

The psychology of religion draws on many other areas of psychology. It includes, for example, the different approaches to religion associated with different personality types, the development of religious faith and understanding in children, the brain mechanisms underlying religious experience and the group processes involved in church life: 'Nearly every branch of psychology can be applied to the study of religious life' (Watts 2005:201). It is also seriously important what you as an individual think when I ask you if religion can be studied scientifically. Your answer will surely depend on your thinking of what is meant by science. Alternatively, what do you think science is?

Again Watts (2005:202): 'The key point is that, at least with human beings, there is room for different explanatory discourses to be developed in a parallel'. What Watts is saying here is that we, as human beings, are complex, multifaceted creatures, and many human phenomena need to be approached at different levels; for example, depression. There are biological aspects of depression, including the genetic predisposition and the biochemistry associated with depression. There are also development aspects, such as the early experiences, which predispose people to depression. Then the most influential and dangerous, as well as the one that has the most impact on any social environment, namely depression that distorts personal relationships.

Nevertheless, in hindsight, the same can be said of religious life. However, here I want to share my own appreciation with Watts (2005):

... he would want to claim here, not only, that different psychological approaches are necessary to understand religious life, but that the theological approach is relevant too, and can sit alongside the psychological approach as a complementary perspective. Whereas psychological approaches generally do not concern themselves with the truth of Christian doctrine, a theological view of religious life presupposes Christian truths. (p. 202)

From an own experience, there are other human beings who try to blend psychology and theology into some kind of hybrid discipline,⁸ incorporating theological and psychological elements in a way that scarcely discriminates between them. This happens most commonly, as Watts (2005:203) points out, 'in the area of pastoral psychology'.

8.I am the first to admit that some years ago, I was certainly guilty in trying to do just that.

Once again, I have to agree with Watts (2005:203): 'In contrast I would want to suggest that psychology and theology have quite distinctive vantage points, functions and characteristics, and cannot simply be fused'. Psychology and theology are distinct, but consistent with one another, and complementary to one another. This brings me back to my initial question in the beginning of this article, why do we as religious humans have to accept evolutionary epistemology in our quest to become better religious humans.

Evolutionary epistemology and its implications for religious humans

It is clear that evolutionary epistemology does not provide comfort to people whose thinking is deeply rooted in traditional, philosophical as well as religious conceptions. Nevertheless, I have argued that theologians, scientists and philosophers, if they really want to make progress in their specific disciplines, can no longer ignore the evolutionist's insight. As Frans Wuketits (1999) wrote:

The insight, however, leads us to the conclusion that humans are neither gods nor created by God, but that they stem from the animal kingdom and that their mental capacities, too, result from evolutionary processes. (p. 210)

Thus, we attain an image of humankind that indeed had been conceived by some naturalists and philosophers more than 100 years ago but, up to now, has not been taken seriously enough: 'A century and a quarter after the first appearance of *On the Origin of Species*, the time has surely come to take Darwin seriously' (Wuketits 1999:211). With Wuketits (1999:211), I would like to take two points to conclude. Firstly, evolutionary epistemology takes a pragmatic view of humans. Evolutionary epistemologists ask how humans really behave and what the true origin of their behaviour is. In contrast to this programme, many conceptions of humans are based on an idealisation of our species. It has been argued that humans were created in the image of God and that God has been the director of all lives. In addition, the human has been pictured as a demigod, having the capacity to change the planet at pleasure. We are part of the biosphere and its complex regulatory systems, so that the biosphere acts back upon our own actions. Hence, one who takes evolution seriously will take nature seriously and know that our actions are constrained by the regular principles of the biosphere. One, as a religious human, who is not prepared to take this seriously will be surprised at the disappearance of the human species.

Secondly, evolutionary epistemology recues something of the old and venerable idea of freedom. Wuketits (1999:211): 'It might be an encouraging perspective that we as religious humans, due to our rationality, are the masters of our future evolution'. Nevertheless, I would like to take a leaf from Simpson (in Wuketits 1999:211) as he states: '... if we want to master our future we must take into account our past, our evolutionary origins and genealogy'. This means that we should grasp our very nature realistically, beyond any illusionism and utopian dreams: 'Future evolution', says

Simpson (in Wuketits 1999:211): 'could raise man to superb heights as yet hardly glimpsed, but it will not automatically do so'. It depends on us to influence this process towards superb heights or towards our disappearance ...

Conclusion

At the beginning of this article, I emphasised that the problem arose when many of Darwin's scientific descendants as well as some ancient and contemporary theologians (long afterwards), instead of taking his widening of the world's horizons as a springboard to more exhilarating visions of God, have seen and decided evolution to be the final defeat of theism.

Under the heading *What do I mean when I speak of evolutionary epistemology?*, I indicated that any epistemic interactions between cultural and biological definiteness of human's epistemic wisdom transcends our so-called rationale because of our trueness in our genetic vulnerability. It is therefore of utmost importance that humans understand and try to accept their own interdisciplinary contexts before they embark on the difficult journey to understand this duality of complexity, as humans are intuitively construed to make ethical decisions with regard to their religious experiences.

I also indicated that my opinion is that any religious humans, if they are truly integrity driven, must take cognizance of the updated evolutionary epistemic interpretations of life, language, behaviour, morality, linguists, ethicists, social scientists, as well as, recently, the medical community.

I also alluded to the brute fact that certain scientists (Dennett and Dawkins) are 'missing the point', so to speak. The point being that evolutionary epistemology, used correctly, could have helped these aforementioned scientists' sometimes profound robust quest in eliminating a *Bigger Entity* in the open-endedness of evolution, or to put it more bluntly: our God who we believe is still in command of such a process.

The British particle physicist, John Polkinghorne, was used in my effort to show how logo-centrism can be part of human's struggle to accept evolutionary epistemology. Under the headings, *perspectives on human nature* and *psychological approaches to religion*, I indicated the thinking of Fraser Watts where he points to a misconstrued view that exists between religion and psychology as well as my own remark on how humans' skewed perceptions, with regard to depression, has a negative influence on our relationships with ourselves, our world and others.

Finally, I showed briefly that evolutionary epistemology takes a pragmatic view of humans, as evolutionary epistemologists ask how humans really behave and what the true origin of their behaviour is. I then put forward my own understanding of evolutionary epistemology and concluded that evolutionary epistemology recues something of the old and venerable ideas of freedom, and it means that we should grasp our very nature realistically, beyond any illusionism and utopian dreams. In footnote 2, I mentioned the vision of God, when one understands, and thus projects, a better

understanding of evolutionary epistemology, one will certainly find one's vision of God more exhilarating. Exhilarating because of the fact that evolutionary epistemology enhances the believer's epistemic context in arguing that our religious beliefs have evolutionary origins and that they were established by a mechanism working reliably in the world of our ancestors, and it then underlines a very basic characteristic of any living organism.

At the very end, I am led simply to draw the reader's attention to Darwin's (1859:458) insight: 'As natural selection works solely by and for the good of each being, all corporeal and mental endowments will tend to progress towards perfection'.

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The author declares that he has no financial or personal relationships which may have inappropriately influenced him in writing this article.

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