

Reflections on the nature and social implications of the theory of evolution

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Opsomming

Die Suid-Afrikaanse staat skryf die evolusionisme in openbare skole voor, wat verstaanbaar is, aangesien die evolusieteorie as wetenskaplik bewese feit verkondig en grootliks so aanvaar word. In hierdie artikel word daar bemoëienis gemaak met die implikasies wat die evolusieteorie vir die Christengeloof in besonder en vir die samelewing in die algemeen het. Drie take word in hierdie artikel onderneem. Die eerste is om aandag te skenk aan die vraag of die aanvaarding van die evolusieteorie, dit is, makroevolusie as skeppingsmetode, nie 'n saak van geloof is nie soos wat dit met die aanvaarding van goddelike skepping is. Die tweede taak ontstaan vanuit die feit dat die outeur 'n Christen is en dit belangrik ag om evolusie as skeppingsmetode op te weeg teen die eienskappe van die God van die Christen, soos Hy Homself in die Bybel openbaar. Die derde en finale taak is die onderneming van 'n analitiese bespreking van algemene sosiale implikasies wat vanuit die evolusionisme logies voortvloei.

Abstract

The South African state prescribes evolutionism in public schools, which is understandable, because the theory of evolution is promulgated, and widely accepted, as scientifically proven fact. This article is concerned with the implications that the theory of

evolution has for the Christian faith in particular and for society in general. Three tasks are undertaken in this article. The first is the task of addressing the question whether acceptance of the theory of evolution, that is, macroevolution as creative method, is not a matter of faith as is the acceptance of divine creation. The second task flows from the fact that the author is a Christian and therefore feels it important to weigh evolution as a method of creation against the attributes of the God of the Christian as He reveals Himself in the Bible. The third and final task is an analytical discussion of general social implications that issue forth logically from evolutionism.

1. Introduction

The present South African state is committed to evolutionism as paradigm for education in general and in particular in the life sciences (Gosling, 2000). The fact that evolutionism is prescribed in education is understandable. The theory of evolution is promulgated as scientific fact, and it is accepted as such by many people. The theory of evolution posits that the origins of the universe and natural life are the work of natural processes, which could have occurred with or without divine guidance.

This article rests on the contention that the theory of evolution provides answers to the question of life's origin, which means that it has social implications, specifically religious and philosophical implications. The author of this article is not a natural scientist and therefore the aim with this article is not a natural scientific refuting of the theory of evolution. The aim is first to determine whether or not acceptance of evolution as creative method is a matter of faith, as is acceptance of divine creation. Once this aim has been met attention can be given to the second aim with this article, namely, an understanding of evolutionism's social implications. Such understanding is to be attained via logical reasoning.

Social implications, by their very nature, impact on the life and world view that children and adolescents form. Analysis of the social implications that emanate logically from society's governing thought-structure is an important task for Christians. As Luther (cited in Barnes, 2003:34) pointed out: "If I confess with loudest voice and clearest exposition every portion of the truth of God except that little point which the world and the Devil are at that

moment attacking, I am not confessing Christ. Where the battle rages, there the loyalty of a soldier is proved."

In the arguments and discussions that comprise this article the following questions will be weighed:

- Is acceptance of the theory of evolution as creative method, like the acceptance of divine creation, ultimately a matter of faith?
- This article is written from a Christian perspective. Thus: Has evolutionism implications for Christian beliefs? In other words, can evolution as method of creation be harmoniously reconciled with the Christian God?
- Has evolutionism other social implications and if so, what are they?

2. Acceptance of evolution theory – a matter of faith?

2.1 Terminological explanation of evolution

The term *evolution* can refer to either macroevolution or microevolution. Since these two terms are not equivalent, it is important to define them before any discussion and argumentation start.

Microevolution refers to variations within a specific species-kind, for example, different breeds of sheep or types of grass. Microevolution is, of course, beyond dispute. It occurs naturally and is synthetically emulated when new breeds of a specific species of animal or plant are purposefully bred. Microevolution occurs because of the "amazing machinery within the [living] cell capable of shuffling and recombining genetic information" (Ackerman & Williams, 1999:51). Part and parcel of microevolution is adaptation, natural selection, mutations, genetic drift, Mendelian genetics and DNA structure and variability. All of these should form part of the curriculum for the life sciences.

Macroevolution is an extrapolation from microevolution, namely, that changes within a species-kind can lead, and have led, to another completely different species-kind. Macroevolution seeks to explain the origin of natural life and the variety and complexity of natural life forms. Unlike microevolution, macroevolution has never been seen to occur, neither in nature nor in the laboratory.

In this article the term *evolution* refers strictly to macroevolution.

2.2 The doctrine of evolution

2.2.1 What the doctrine of evolution says

Stated briefly the theory of evolution (macroevolution) says that at the very beginning was inert matter from which the first living cell emerged. Stanley Miller, in 1953, subjected a mixture of hydrogen, methane and ammonia in water to electric sparks and found that after a week some amino acids had formed (Perloff, 2001:64). Similar experiments have followed and such experiments provide apparent validation to the evolutionist theory that in a primeval ocean the amino acids combined to form polypeptides (the basis of proteins and the building blocks of life) and such peptide synthesis eventually gave rise to the first living cell (Perloff, 2001:64; Wilder-Smith, 1974:34-35; 1981b:9ff). From this original simple cell, then, all forms of natural life are said to have evolved.

In the next section, the evolutionary explanation for the first emergence of natural life shall be discussed. In the section thereafter the evolution of the different natural life forms (the different species-kinds) shall be discussed.

2.2.2 The emergence of life

As pointed out above, the evolutionary explanation of the emergence of the first living cell is that it occurred via autogenesis, that is, it evolved spontaneously, by itself, from nonlife. This explanation is a theoretical extrapolation from experiments such as that of Miller, but such experiments only succeed in synthesising organic matter, not life itself. In fact, science has shown that the generation of life *always* requires already existing life. This fact was first proved by the "swan-neck jar" experiments of Louis Pasteur (1822-1895) (Goertz, 1990:6; Wilder-Smith, 1981a:23, 1981b:viii-ix) and further validated by the experiments of Joseph Lister (1827-1912). Discovery of this fact led to modern sterilisation practices (Perloff, 2001:63).

Pasteur realised that his experiments precluded the notion of autogenesis. When he laid his theory before the University of Sorbonne, he predicted that the theory of spontaneous biogenesis from nothing or from nonliving matter – which can be traced back to the ancient philosophies of the Chinese, Hindus, Egyptians, Assyrians and Greeks (Goertz, 1990:5; Sunderland, 1988:13) –

"would never recover from the fatal blow delivered by his experiments" (Gitt, 1997:107).

Modern molecular biology has shown that the "central characteristic of all living beings is the 'information' they contain, and this information regulates all life processes and procreative functions" (Gitt, 1997:88; see also Gitt, 1997:9). This information constitutes the genetic code. Although the concept *genetic code* was still unknown in Pasteur's and Lister's times, their experiments show that the necessary information for the generation of life can only be obtained from pre-existing living systems. Experiments such as that of Miller (see section 2.2.1) show that organic building blocks of life can arise spontaneously, but that is still a long way off from the spontaneous formation of the genetic code on which all natural life rides.

It must be noted here that there are two types of order or patterns of organisation. The one type is not information, but a meaningless pattern that arises naturally and randomly, for example, snowflakes and rock-formations. Random patterns can, and do, arise spontaneously, but such patterns do not constitute information. In the other type of pattern, information is the critical ingredient; a *meaningful* order is constructed in accordance with an external design (information) drawn up by an intelligent, external designer. (Horn, 1996:203.)

Models have been proposed to explain how the first genetic code could have originated spontaneously in matter without an external designer (Gitt, 1997:104), but the fact remains that these are purely mental models without any empirical basis. In reality, because information implies meaning, it *always* requires an external intelligent source (Gitt, 1997:67; Wilder-Smith, 1981a:77ff). The eminent and non-Christian scientist Paul Davies (quoted in Alcorn, 2009:487) writes: "Like a supercomputer, life is an information processing system ... It is the software of the living cell that is the mystery, not the hardware ... How did stupid atoms spontaneously write their own software?" Clearly, the idea that the first living cell and its concomitant genetic code arose in the absence of an external designer who encoded the genetic information is a matter of pure faith. The biochemist Ernst Kahane admits this. He says: "It's absurd and complete nonsense to believe that a living cell creates itself, but I believe it, as I can't imagine it happening any other way" (quoted in Horn, 1996:173).

2.2.3 Change in species-kind

The theory of evolution teaches that all the different natural species evolved from the first living cell. This upward trend to greater complexity would necessarily require that the genetic code develop completely new information with each major change, for example, new information is required to develop wings in order to evolve from reptile to bird. However, no evidence has yet been found that new information can be created to generate a completely different kind. In nature, natural selection, mutations and genetic drift combine, shuffle and/or deplete genetic information, and this is synthetically emulated in breeding experimentation. In both nature and the synthetic emulation thereof new breeds can be formed, but the species-kind *never* changes (Ackerman & Williams, 1999:51). In fact, present evidence points to a limit to the amount of change that a species can undergo even in microevolutionary processes such as breeding specific traits such as size, hardiness, improved food production, and so forth in livestock and plants (Fowler & Kuebler, 2007:95).

Furthermore, in addition to the empirical failure to effect species-kind change, the crucial evidence of an intermediate, transitional fossil is still lacking (Brand, 1997:172ff; Denton, 1986:162ff; Fowler & Kuebler, 2007:86ff, 166ff; Gish, 1991; Holbrook, 1987:147-149, 208; Parker, 1987:128ff; Perloff, 2001:79-109; Sarfati, 1999:47ff; Sunderland, 1988:69ff, 98ff; Woodward, 2003:40ff, 121ff). Darwin himself confessed that the fossil record did not show what his theory predicted. Darwin's own words in his book *The origin of species* were: "Why is not every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely graduated organic chain; and this is the most obvious and serious objection which can be urged against the theory" (quoted in Fowler & Kuebler, 2007:166-167; Sarfati, 1999:47; Woodward, 2003:122).

Claims have been made that transitional links have been found (Fowler & Kuebler, 2007:86), and these should be considered but not too readily and not uncritically (Parker, 1987:160). Thus far all such claims can be and, in fact, are contested, not only by creationists but also by evolutionists. Claims of the finding of an ape-to-human transitional fossil are also open to contention, and many have already been debunked. Examples can be found, for

example, in Gish (1991), Parker (1987), Perloff (2001), Sarfati (1999) and Sunderland (1988).

Despite the lack of empirical evidence, the evolvment of new species-kinds could be true. However, at this stage, it remains an idea which, like the idea of autobiogenesis, is a matter of faith (see section 2.2.2).

In the following section the possible synthetic creation of life and radical species-kind change and what it would imply shall be considered.

2.2.4 Synthetic production of life and radical species-kind change

Since the time of Pasteur few, if any, scientists believe in the spontaneous generation of life from non-living matter. Nevertheless many scientists are endeavouring to produce life in the laboratory (Wilder-Smith, 1981a:23). Possible experimental success cannot be ruled out. But would such synthesis rule out divine creation, that is, would it prove that natural life came into existence via a natural, spontaneous process? The answer is that it would not prove it. It would, in fact, leave the idea of autobiogenesis in the same logical position as it was before, neither proved nor disproved, and thus a matter of faith. The reason is explained below:

Endeavours to synthesise life from nonliving matter represent *non-spontaneous* biogenesis, and not spontaneous biogenesis. Wilder-Smith (1981a:23), a creationist scientist who has three doctorates in Chemistry and Pharmacology, explains why: "For all experimental interferences with matter rob us of the right to designate an experiment as a 'spontaneous' event. A truly spontaneous reaction must be independent of all intelligently manipulated changes of conditions." Thus, the production of life from non-living chemicals (and the production of species-kind change) in the laboratory would be "the product of intelligence, not chance" (Coppedge, 1973:139). "It would provide no evidence whatever that such a thing could ever have happened without conscious intelligence directing every condition. The Christian need not lose his balance over claims of such accomplishments" (Coppedge, 1973:202).

Thus, and this is important, successful laboratory synthesis of life and/or radical species-kind change would actually appear to prove

not macroevolution, but that the first life and the first specimen of each species-kind were uniquely created by an intelligent and cosmically extrinsic Creator, and thereafter microevolution gave rise to the variety found within each species-kind.

Deduction as to autogenesis and species-kind change will, therefore, like divine creation, always remain beyond the possibility of irrefutable scientific proof. Both beliefs are ultimately held by faith because the emergence of the first life and the first specimen of each species-kind were once-off historic events with no human witnesses. Nevertheless, texts such as Psalm 19:1-4, Psalm 24:1-2, Psalm 33:6-9, Job 38-39 and Romans 1:20 clearly proclaim a divine Creator and, furthermore, Romans 1:20 warns that nature's declaration of God is such that we "have no excuse for not knowing God".

Returning to evolutionist scientists, their endeavour to explain the genesis of life and the variety of life-forms necessarily turns to inference – to assuming that macroevolution *must have* occurred. But, as Stark (2011: 50) points out, *must have* "is one of the most suspect phrases in the scholarly vocabulary; usually it should be translated as 'we don't really know, but perhaps'".

Macroevolution, like divine creation, is, and will always remain, a matter of faith, because, as already stated above, the genesis of the first life and the first specimen of each of the different species-kinds were once-off historic events with no human witnesses. Thus, the question as to natural life's origin is a religious/philosophical question with religious/philosophical implications, which makes the prescribing of an evolutionary paradigm for education a matter of concern. This article is specifically concerned with Christian beliefs, and therefore the question whether the theory of evolution can be harmoniously reconciled with the Christian God without distorting His true nature and sacrificing the integrity of the Bible is important for this article. Evolutionism provides a tidy solution to the problem of natural life's origin, but is it as a method of creation truly reconcilable with the attributes of God as He is revealed in the Bible? This is a crucial question because Romans 1:20 declares that: "Through everything God made, they can see his invisible qualities – his eternal power and divine nature." This question is addressed in the next section.

3. Evolution and the Christian God

There exists theoretically no reason why a Creator-God should not use macroevolution as his method of producing natural life. Many Christians are inclined to think this way. They accept macroevolution as a fact, but they cannot conceive of life, particularly human life, as being an accident of nature, a product of blind chance. God then replaces chance, and is said to have created original matter to perfectly fit the creation of life and His creative power operating via natural processes drove the first emergence of life and thereafter the upward macroevolutionary processes (Pigdon, 1995: 95-99; Wilder-Smith, 1974:167-168). Christians who add the concept of God to evolutionism accept evolution as indisputable, but laudably want to restore love, purpose and meaning as the prime movers behind life, rather than the cold meaninglessness of blind chance (Pigdon, 1995:99-100). Furthermore, blind chance cannot explain the design and purposefulness that nature clearly reveals, and these properties of nature are of concern to many scientists. Adding God to evolution does explain these properties of nature. However, even though adding God to the evolutionary worldview is a sincere and well-intentioned idea, it is not without problems for Christians.

Pigdon (1995:97) who is a Christian evolutionist himself, explains that they replace pure chance as the cause of upward evolutionary changes with "an intelligent creator who permanently pervades the universe and operates through the laws of nature". In nature, natural selection (mutations, genetic drift and survival of the fittest) drives microevolution (changes *within* a species-kind) and, logically, it is therefore the only natural method that can be regarded as the one through which God would operate to drive macroevolution (changes from one species-kind to another completely different species-kind).

In nature, natural selection proceeds necessarily via the principle of the survival of the fittest – that the strong are favoured rather than the weak (Wilder-Smith, 1974:167-168) – which is a painful and wasteful process because "many individuals fall by the wayside, poorly adapted, and fail to survive and/or reproduce" (Scott, 2004:xxiii). In both the human and animal worlds, life is certainly often painful and cruel, and the strong are often favoured at the expense of the weak. Nevertheless, these characteristics of natural selection, and therefore

of evolution, stand in stark contrast to the character of Christ and the Father with whom He is One. They are characteristics of a fallen world, never of God as He is described in the Bible.

The character of God was most meaningfully revealed for our human understanding in the God-Man, Jesus Christ. Moreover, Jesus Christ is not only the perfect character image of God, but He was the Father's agent in creation; "through whom also He created the world" (Heb 1:2). The Sermon on the Mount (Matt 5) unveils love, compassion and mercy for the weak as important attributes of Christ's character and that Christ rewards, not the strong, but the meek, the humble and the unselfish. In the Old Testament, too, in His laws and in His messages to the prophets, God reveals His hate of injustice towards and oppression of the weak and the lowly. As Psalm 138:6 says: "For though the Lord is high, he regards the lowly." Clearly, the Christian God would never use destruction and death, particularly not of the weak, to create life and new life forms (Wilder-Smith, 1974:167ff; Gitt, 1993:92ff).

The molecular biologist, Jacques Monod, is a materialist and atheist, but he recognises that the Christian God would not use the destruction of the weak as method of creation (cited in Ham, 1997:74-76). Eugenie Scott (2004:xxiii) is also a materialist and atheist and she, too, recognises the irreconcilability of creative macroevolution with the Christian God; she asks that since "the variety living things we see today is primarily the result of the incredibly wasteful and painful process of natural selection, can this really be the result of a benevolent God"?

Skolimowski (1983:60-61), also an atheist, points out that macroevolution is logically inconsistent with the foundational theme of the Bible, namely Creation, Fall and Redemption. Furthermore, Skolimowski recognises that macroevolution can only logically accommodate Jesus, not as God, but as a man who, as a prototype of human potentiality, can inspire humanity upwards to higher states of spiritual evolution. As Skolimowski recognises, evolutionism leads logically to another Jesus and another Gospel. The implication of this, set out by Paul in Galatians 1:8-9, must not be evaded by Christians.

Genesis 1, in fact the whole of Genesis 1-11, is important and not as myth: "Nowhere else in the Bible is the personal nature of God expressed in more vivid terms" and these chapters also set "before us

a presentation of God's greatness no less vivid than that of His personality" (Packer, 1993:93). The reduction of Genesis 1-11 to myth has bred uncertainty and confusion about the nature of God and about the integrity of the Bible and divine revelation. If the literal view of Genesis 1-11 is incorrect, if the events did not actually occur as they are described, how does one decide which biblical accounts are historical events? In this regard Clark (1993:102) asks: "And is the crucifixion historical? What is the criterion by which one may distinguish an event that really occurred in time from some revelational, supra-temporal symbol?"

The metaphysic of Genesis 1-11 was the metaphysic of our Lord Jesus Christ, and without it everything that He said and did becomes well-nigh meaningless (Machen, 1995:39). Stripped of its fount of meaning, the contemporary Church has become culturally impotent, the numbers of Christians in historically Christian societies are dwindling, and many contemporary people who regard themselves as Christians are living lives that contradict biblical morality.

This section concluded with a review of the implications of evolutionism specifically for the understanding of the nature of the Christian God. In the following section other, more general implications of evolutionism are explored.

4. General implications of evolutionism

This article concerns evolutionism. Therefore this section concentrates on evolutionism as a causative factor of the cultural issues discussed. However, it is necessary to point out that the author recognizes that at any one time there are always a number of ideas, some more significant than others, that come together to form the dominant *Zeitgeist*, or thought-structure, which drives society.

At the outset of this section it must also be stressed that the implications explored are logical concomitants of evolutionism. That some are not widely advocated is only because evolutionists are not always true to their premises, but to their hearts, to God's law that He wrote on the human heart (Romans 2:15).

4.1 Denial of the Christian God

Despite the well-intentioned attempts to integrate Christian concepts with evolutionism, evolutionism by its very nature renders

the God-postulate unnecessary. Thus, soon after the publication of Darwin's theory of evolution in 1859, evolutionists started expressing their confidence that religion would lose its plausibility and eventually vanish. Predictions as to the end of religion are known as the *secularisation theory*, a term coined by the German sociologist, Max Weber (1864-1920), who "defined it as the 'disenchantment of the world' – the 'emancipation' of the modern mind from supernaturalism" (Stark, 2011:369). However, widespread secularisation never occurred. The Gallup World Poll (China excluded) conducted in 2007 showed that secularists only made up 5% of the total population of the world (China excluded), which means that the world is still very religious (Stark, 2011:390-391). What did happen, however, was a decline in the "mainline", originally orthodox Christian denominations who "[i]n the name of theological 'enlightenment' . . . offer extremely inexpensive religion, stripped of moral demands and of all but the vaguest sort of supernaturalism" (Stark, 2011:379). The subsequent gap has been filled by a postmodern, eclectic mix of religious ideas that posits spirituality as a product of evolution and God as the higher power or cosmic force that works in nature and is one with nature (Horn, 2007).

The youthful counterculture of the 1960s played a pivotal role in the West's shift away from the Christian God and the authority of His moral laws. Perloff (2001:230), who was part of the 1960s American counterculture of drugs, sex, esoteric spirituality and violent unrest, explains that when "you were young, you weren't hot about Biblical morality to begin with". Thus, he says, the message of evolution that the students heard, not the direct words but their interpretation, was that there was no God to revere and fear, which gave them as rebellious teenagers "an excuse to do what [they] already wanted to do" (Perloff, 2001:230). But the result was not the freedom and happiness which was sought. Instead, life became bereft of no higher purpose than physical pleasure, which led to a search for meaning in life via substance abuse, sexual permissiveness, political activism and esoteric religions.

The consequences of rejecting God as He reveals Himself in nature, namely, powerful, majestic, and awe-inspiring, is described in Romans 1:18-32. This is a passage that should inspire fear in our human hearts. It teaches that when we do not acknowledge God,

either by denying His existence or thinking up our own ideas of what God is like, He withdraws Himself from us and abandons us, on the one hand, to our reprobate minds, whose thinking is futile and foolish, and, on the other hand, to our sinful nature, which includes not only our impure sexual desires but also our selfish desires which without God's restraining hand can reach a point where no value whatsoever is given to other persons, not to their possessions, their feelings, their reputations nor to their lives. Of course, evolutionism is not the only factor that drives people to deny God or to create their own god, but it is the factor that lends scientific respectability thereto.

Moreover, evolution reduces humans to the level of being no more than intelligent animals, and if people are animals then no reason exists why they should put any restraint on their impulses and desires. In this regard and in conjunction with the denial of God and, inevitably also His moral laws, evolution serves to compound selfishness, a perennial human problem, and the problem of sexual permissiveness, which is rife today not only among adults but also among adolescents and sometimes even among children.

The reduction of humans to animals is discussed further in the following section.

4.2 The loss of distinction between humans and animals

In evolutionary thought humans are highly evolved animals. Thus, a distinct line cannot be drawn to separate humans from animals. However, the moral foundation on which human worth, human dignity and human rights stands is the affirmation that humanity is a species that differs in kind and not merely in degree from the rest of nature (Adler, 1993). Macroevolution renders distinction between a human and an animal meaningless, and without such a distinction there is nothing *in principle* wrong with treating humans no better than the animals "that we harness as beasts of burden, that we butcher for food and clothing, or that we destroy as disease-bearing pests or as dangerous predators" (Adler, 1993:263). In this moral dilemma, created by the idea that humans and animals differ only in degree, one is left with no argument to justify the differential treatment of humans (Adler 1993:257-258). Subsequently the concept of human rights collapses.

The concept of human rights depends on the uniqueness of humanity and in particular on the biblical concept of humans created in God's image; humanity's worth issues forth as image-bearer of God (Horn, 2006:24-25). Already almost thirty years ago Veith (1987:128) recognised that divorced from its biblical context the term human rights had become a generality, a "buzz-word" invoked mostly to protect issues such as abortion, euthanasia, sexual rights, animal rights, and so forth.

In the next section, evolution as justification of political evils shall be discussed.

4.3 *The justification of political evils*

The history of the world has always been largely one of tyranny, dictatorship and oppression and sometimes even genocide. In this section it shall be argued that evolutionism actually invites and justifies these characteristics of our fallen world. Sadly, the Christian evolutionist, too, cannot condemn these characteristics. If evolution was God's method of creation, how can one condemn ruthlessness and the death of the weak? After all, God said that each step of His creative process was good (Genesis 1).

In fact, the very process of evolution – the wiping out of species less genetically well-endowed in the advancement towards a higher, more comprehensive existence – appears in principle to be good because the consequence is good, namely, genetic advancement. Thus, as Wilder-Smith (1974:186) says, for Hitler, Mussolini, Stalin and their many twentieth century counterparts evolutionary theory was "a real windfall, in fact a godsend . . . the excuse to enslave whole peoples, or wipe them out". Evolutionism, of course, did not cause such depravity. Free reign given to humanity's fallen sinful nature caused the atrocities. Dictatorship and oppression was part of history before the twentieth century, but prior to Darwin dictators and oppressors did not have "the advantage of such a ready-made excuse for their wickedness as Darwinism offered" (Wilder-Smith, 1974:189).

The idea that such consequences follow logically from evolutionism goes against the grain of most evolutionists. For example, Richard Dawkins, the evolutionary biologist and militant protagonist for atheism, says that he hates the "logic that wheels out Darwinism" as

an excuse for social atrocities, but as Harwell (2008) points out, "he fails to give any reasons for why such implications are not valid". In fact, Dawkins rejects the logic that flows from his premises because, although he denies the existence of God, he is still listening to the law that God wrote on his human heart (Romans 2:15).

The weeding out of the physically and psychically weak for the enhancement of the human race follows logically, and has in practice followed – for example, in Nazi Germany and the Communist Soviet Union – from evolutionary theory. One example of how it is manifesting itself today is the aborting of unborn babies who are suspected of being physically and/or mentally handicapped. Another example is the call for euthanasia of the old and/or terminally ill patients. Moreover, in the evolutionary worldview humans are merely highly evolved animals. Therefore, if euthanasia is the humane option for seriously sick and/or defective lower animals, then it is logical to also apply it to humans when they are terminally ill and ultimately to any person who is physically or mentally "defective".

Another logical conclusion that follows from evolutionism is the idea of further evolution to a higher, posthuman level of being.

4.4 *Further evolution to the posthuman level*

The possibility of further evolution was held by Pierre Teilhard de Chardin (1881-1955), a Jesuit priest schooled in palaeontology. Teilhard believed that human evolution would continue towards higher levels of consciousness (Horn, 1996:168). The philosopher Friedrich Nietzsche (1844-1900) also believed in the possibility of further evolution (Sorgner, 2009). Nietzsche realised, and applauded, the fact that humans have an inherent will-to-power and he conceived the idea of an *Übermensch* as an evolutionary triumph of humans' will-to-power. Further evolution also forms part of transpersonal psychology, an academic discipline that concerns itself with the actualisation of paranormal abilities as the next step in human evolution (Horn, 1996:140-141). The most recent movement – it only emerged in the 1990s (Putman, 2010) – that includes the possibility of further evolution is transhumanism.

The transhumanist philosopher Sky Marsen (2008) explains that: "Transhumanism (or Human Plus, H+) is a social and philosophical

movement that explores the uses of technology for the positive transformation of human capacities." The transhumanist vision is a next phase of evolution that transforms humanity on physical, emotional and cognitive levels by using knowledge gained in the fields of genetics, pharmacology, robotics, cybernetics, artificial intelligence and nanotechnology. Nick Bostrom (2005), co-founder of the World Transhumanist Association who taught at Yale but has since moved to Oxford, writes: "Transhumanists view human nature as a work-in-progress: a half-baked beginning that can be remolded in desirable ways through intelligent use of enhancement technologies. In this sense transhumanism is not only an area of study but also a world-view."

The term *transhumanism* refers to a transitional phase between humanity and posthumanity. It is the phase during which technologies are applied in order to effect the supposed change from human to posthuman. Transhumanists believe that we have or soon will have the technological know-how to take evolution in our own hands and to thus enhance the human condition and ultimately form more advanced posthuman beings. They believe genetic engineering will eradicate disease and physical and mental disabilities via, for example, therapeutic and enhancement genetic engineering and designer babies who have been genetically modified prior to birth. Thereby death can possibly be conquered, or at least life radically extended and the quality enhanced. They also believe robotics can increase physical capabilities by replacing limbs with computerised prosthetics whilst neuro-pharmaceutical drugs and brain-machine interfaces can boost brain power, sensory abilities and emotional well-being. Thus, the posthuman is envisaged as both a genetically manipulated being and a fusion of human and machine. As Smith (2011) notes, transhumanists believe that "[o]ne's genetic make-up, neurological composition, prosthetic augmentation, and other cybernetic modifications will be limited only by technology and one's own discretion",

Transhumanism is not promoted on the edge of the recognised academia, but at leading universities such as Yale, Oxford and the Massachusetts Institute of Technology (Putman, 2010). In fact, if one believes in evolution, why should one believe that evolution stopped with humanity in the current form? There can be no doubt that bioscientific progress and technological advancements are such that we appear to be capable of transforming and altering

humanity. Transhumanists view this prospect as "positive and inclusive . . . [an] embrace [of] new technological possibilities to lead lives that are better than well" (Bostrom, 2004). Sadly, however, the very idea behind transhumanism, namely, that humanity can and should be enhanced into a super race was the rationale behind the Nazi atrocities. The Nazi atrocities were committed in order to weed out the "unfit", and thus prevent degeneration of the human race. Hitler's *Herrvolk* was a dangerous illusion. The posthuman, too, could be an illusion, and it could be as dangerous.

What transhumanism in reality is, is an expression of the longing for eternity that God has planted in every human heart (Eccl 3:11). As Alcorn (2011:240) says: "What God . . . made us to desire is exactly what he promises to those who follow Jesus Christ: a resurrected life in a resurrected body, with the resurrected Christ on a resurrected Earth." How sad that transhumanists experience the God-implanted yearning for eternity, that they want what God promises, but without the Lord Jesus Christ. Their doctrine of "heaven" is secular, and, as argued above, could have disastrous consequences.

5. Conclusion

The theory of evolution has some decidedly negative social implications, and is, moreover, "not a scientific theory but metaphysical" (Sir Karl Popper, quoted in Sunderland, 1988:28), a fact which is not, but should be, readily available, both to the public and in public schools. After all, the aim of education should never be to indoctrinate students in any matters of faith, and evolution theory is a matter of faith. The aim of education should be to develop independent thinkers who search deeper and weigh ideas in the light of all the evidence (Horn, 1996:285-286). Thus, the host of scientific evidence against the theory of evolution should be presented to students for open discussion alongside the evidence offered for evolution theory, but also alongside the evidence offered for a Designer and Creator.

There are ultimately only two theories on the origin of life and the multitude of life forms, namely, divine creation and macroevolution. Students should be presented in an unbiased manner with the respective evidence for and against both which will then, hopefully, allow them to make an informed decision for themselves.

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