Postmodern Spirituality: an Analysis of its Theoretical Grounding

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Twee voorveronderstellinge wat die staat vir Suid-Afrikaanse onderwys voorskryf is die evolusionisme en die ontkenning van objektiewe religieuse waarheid. In hierdie artikel word daar geargumenteer dat hierdie voorveronderstellinge aanleiding gee tot 'n wêreldbeskouing wat legimiteit verleen aan onbybelse geestelike praktyke. Hierdie wêreldbeskouing, wat wesenlik postmodernisties is, omdat dit objektiewe religieuse waarheid ontken, is onderliggend aan Westerlinge se toenemende belangstelling in onbybelse geestelike idees en praktyke. Die aard van hierdie wêreldbeskouing is dié van vergeesterde naturalisme. oftewel panteïsme, waar die kosmos as goddelik en die geesteswêreld as inherent deel van die kosmos beskou word. In hierdie artikel word die teoretiese begronding van hierdie wêreldbeskouing ontleed. Dit behels eerstens 'n uiteensetting van hoe die naturalisme deur middel van die evolusieteorie as wetenskaplike regsinnigheid gevestig is en hoe die naturalisme beide ateïsme en panteïsme ondersteun. Tweedens behels hierdie artikel 'n oorsig van CG Jung se psigo-analitiese teorie, omrede dié teorie wetenskaplike geldigheid verleen aan die reduseringe van alle religieë tot mite en die verheffing van mistieke, geestelike praktyke tot psigologiese hulpmiddels. Derdens behels

hierdie artikel 'n ontleding van die metafisiese afleidings wat vanaf die nuwe fisika gemaak word. Dié ontleding word genoodsaak, omrede postmoderne spiritualiste hulle tot die nuwe fisika wend as harde wetenskaplike bewyslewering van hulle wêreldbeskouing. Hierdie artikel eindig met 'n kritiese beoordeling van die geldigheid van hierdie wêreldbeskouing.

1. Introduction

Two paradigmatic presuppositions that the South African state prescribes for education are evolutionism (Gosling, 2000) and the denial of objective religious truth. The latter ensues from the policy on religious education that forbids the promotion of any one creed or belief over any other (Ministry of Education, 2001:43). All religions are to be presented as equally valid. Religions do, however, have irreconcilable differences. Such an approach conveys therefore, implicitly or explicitly, a denial of objective religious truth. In this article it shall be argued that these assumptions undergird a worldview that explains the rising tide of interest among westerners, who were traditionally Christian and more recently secular, in topics such as astrology, mind power, contact with spirits and/or the dead, mystical (contemplative) spiritual practices and alternative, holistic health practices that claim to address body, mind and spirit.

During the era of modernity the majority of westerners rejected religion. During this era all topics, including biblical miracles, which defied rational, scientific explanation were regarded as superstition and of doubtful intellectual responsibility. The era of modernity was an era of materialism. The current postmodern era is the opposite. As Anderson (1990:187) points out: instead of "the final triumph of reason over superstition ... we seem to be in a world with more religion than there has ever been before." The renewed interest in religion in the West is, however, a "matter not of what is true but of what one likes and what one wants" (Veith, 1994:194).

During the modern era religious arguments were arguments about questions of fact (Veith, 1994:193). Modernists stated materialism and atheism as objective religious truth and argued that Christian claims were not true. Postmodernists have thrown out altogether the idea of objective truth. They reject Christain claims 'because they purport to be true' (Veith, 1994:19). The postmodern solution to the ultimate despair of materialism and atheism was to recast it into an optimistic mode; if nothing is objectively true, then anything can be subjectively true. Thus modern religious scepticism was transformed into postmodern credulity where anything can be believed. Unrestricted by objective truth, postmodernism has made room for a worldview that legitimises all kinds of unbiblical,

nonrational spiritual beliefs and practices. These are uncritically presented in the popular media and according to official policy must be uncritically presented in South African schools in the form of the prescribed *religion education*.

The historical process that took the West from the materialism of modernism to the eclectic spirituality of postmodernism is traced in this article. This article examines theories in Western intellectual history which explain the West's shift from materialism to eclectic spirituality. The Bible calls on us to understand the present times (Romans 13:11) and to refute arguments and theories that set people's minds against truth and thus against Christ (2 Corinthians 10:5). The aim of this article is therefore to make explicit and critically assess the theoretical grounding of the new, postmodern interest in religious and spiritual matters and its undergirding spiritual but unbiblical worldview, which is the worldview that our children educated within the state prescribed paradigm will in all probability acquire.

This article rests on the contention that naturalism forms the philosophical framework for both the modernist rejection of spirituality and the 'new' postmodern interest in all kinds of nonrational and/or spiritual phenomena. This article begins therefore with an exposition as to how naturalism was established as scientific orthodoxy in the West and how it supports both the materialism and atheism of the modern era and the new spirituality that is emerging during the current postmodern era. Before proceeding, it must, however, be mentioned that all postmodernists do not uphold a spiritual worldview nor are the upholders of a spiritual worldview all postmodernists. However, the spiritual worldview which is the topic of this article is a worldview that denies absolute truth, in particular religious truth, and such denial is typically postmodern.

2 Naturalism – the philosophical framework of modernism and postmodernism

2.1 The theory of evolution – the scientific grounding of naturalism

The origin of the universe and the life it contains is a question that every worldview attempts to answer. Prior to Darwin the majority of westerners considered an extra-cosmic, intelligent Mind to be the ultimate first cause behind the origin and design of the universe. Darwin swept away this logic which argues that design proves a designer (Wilder-Smith, 1970:230). After Darwin, recourse to God as the Creator of the world and its living things was no longer necessary. Richard Dawkins, an atheist biologist, claims that after Darwin it became possible to be an intellectually fulfilled atheist (Sarfati, 1999:19).

Darwin only addressed phylogenesis (the appearance of the different phylic species) and not abiogenesis (the genesis of life from nonlife), but the progression from nontheistic phylogenesis to spontaneous abiogenesis is logical and well-nigh unavoidable. Once it has been accepted that all the different phylic species emerged via a nontheistic mechanism, albeit over an extremely long period of time, it is logical to posit the spontaneous generation of life from nonlife, also over an extremely long period of time.

The theory that all life forms evolved progressively from inert matter right up to humankind is based on observed factual data. Such data is interpreted within a naturalistic framework and the naturalistic conclusions are then claimed to be scientifically proven. But this is circular reasoning; the premise of naturalism is used to prove the truth of naturalism. In fact, the theory of evolution, like all theories concerning origins, is not and can never be scientifically proven. The same data can be interpreted in another, equally logical way that proceeds from nonnaturalistic, theistic premises (Sarfati, 1999). In fact, any theory concerning origins is a matter of faith; origins can never be observed nor repeated. Even if scientists were to discover relevant natural laws that enabled them to create life from nonlife in the laboratory, it would not prove that the first biogenesis was due to exclusively natural processes. It would not be the natural laws that created the new living system (as evolution requires), but the application of the laws by the intelligent mind of the scientist (Wilder-Smith, 1974:92-93, 1975:32-35, 1981:25ff).

Darwin's theory of evolution led Western scientific thought to philosophical naturalism. Darwin's theory has been adapted, but his idea that all the myriad forms of life evolved progressively upwards through natural selection and adaptation has been well-nigh universally accepted as proven truth, and not as the untestable, "highly speculative hypothesis without direct factual support" which it in reality is (Denton, 1987:77). Sir Karl Popper (cited in Sunderland, 1988:28) explains why: Darwin's "theory of adaptation was the first nontheistic one that was convincing; and theism was worse than an open admission of failure, for it created the impression that an ultimate explanation had been reached."

To understand the antagonism to theistic explanations, one must turn back, albeit very briefly, to the Enlightenment in which human reason was elevated to the position of highest authority and a consequent attack on the supernatural events described in the Bible was launched. Everything in the Bible "that does not fit our understanding ... (was) discarded as myth, falsehood or pious fabrication" (Brown, 1990:213). Within this climate of scepticism towards biblical truth that the Enlightenment philosophers had engendered, Darwin published his book, *The origin of species by means of natural selection or the preservation of favoured races in the struggle for life*, in 1859. In this climate, agnostics "were in the mood to hail it as what

seemed to be the first totally acceptable explanation for the origin and development of living things" (Frair & Davis, 1983:12).

Acceptance of the theory of evolution meant that the view of nature as an exogenously designed and fully created structure was abandoned in favour of the view of nature as a self-created structure (Capra, 1990:105). Initially this new view led westerners to secularism and atheism, but since the late twentieth century there has been renewed interest in religion. The shift back to religion and the form of that religion, namely, pantheism, are discussed in the next section.

2.2 Naturalism – the framework for the shift from materialism to pantheism

A naturalistic framework presents people with two religious options. The first is materialism where the origin and development of life forms are reduced to physico-chemical processes. In materialistic naturalism there is assumed to be no God and no spiritual reality, but only the physical universe driven by blind mechanical forces. The other option is that of vitalism/spiritualism where the origin and development of life forms are reduced to impersonal outworking of indwelling, vital/spiritual properties of matter. Spiritual naturalism is pantheistic, in contemporary terminology, holistic: God and all things, spiritual and physical, constitute one unity.

By its very nature, pantheism has animism as an integral part. Animism, in turn, has occultism as integral part; from a belief in spirits in nature it is but a small step to seeking to share and control their powers (Lucas, 1996:137).

In the alternative Western spiritual tradition (that is, alternative to biblical Christianity) the spiritualisation of evolution and the concomitant occultism started soon after Darwin's theory was published. In the late nineteenth century, Helena Blavatsky, the founder of the Theosophical Society, influenced by Hinduism and Darwin's theory of evolution, formulated a theory of spiritual evolution (Osborn, 1992:81). In the twentieth century, influential spiritual evolutionists included, among others, Rudolf Steiner, who called his philosophical system *Anthroposophy*, George Gurdjieff, who contributed to the inclusion of occult methods into contemporary psychotherapy (Roszak, 1976:139, 147), and Carl Jung, who also included occult methods in his psycho-analytical theories. Jung (1970:83) regarded the "widespread and ever-growing interest in all sorts of psychic phenomena, including spiritualism, astrology, Theosophy, parapsychology and so forth" as 'a helpful light' to overcome the spiritual darkness of modern times (Jung, 1970:86).

Spiritual darkness was an outgrowth of the fact that Western science embraced materialism, and its scientific status ensured its dominance. The upshot was modernism; the era when naturalism and, in particular, materialism and its concomitant atheism were presented in the robes of scientific rationalism. To be accommodated in this way of thinking, liberal theologians "assumed that the miracles of the Bible did not occur and must be accounted for in nonsupernatural ways" (Veith, 1994:191). Biblical Christianity was pushed into the background, but by the late twentieth century "modernism itself, with its supreme overconfidence and manifest failures, became a mockery ... and dragged down liberal theology with it" (Veith, 1994:192).

Few people, however, turned back to biblical Christianity. A new worldview, existentialism, had come to the fore which conceived of life's ultimate meaning and purpose as rationally unintelligible and therefore turned the individual inward to the self as the centre and creative source of meaning. Thus, when a large number of young people defected in the 1960's from the West's empty gospel of scientific progress and material success and launched an active search for meaning in life they sought it not in biblical Christianity – the image of humanity as subservient to God's will was unacceptable (Capra, 1990:462) – but in eastern religions and pagan shamanism. These religions's techniques for physical, emotional and spiritual health were freely borrowed and synthesised with the basic assumptions of humanistic psychology. Out of this synthesis there emerged the so-called New Age movement (Horn, 1996: 41ff, 125ff).

The New Age movement initially existed on the fringes of Western society, but since the late twentieth century mainstream Western society is increasingly embracing the irrationality and spirituality of the New Age movement. New Age spirituality is typically postmodern since it has the same distinctive, foundational characteristic as postmodernism, namely, the denial of absolute truth. Ironically, the truth of the theory of evolution is not questioned by postmodernists.

Postmodern spirituality fits itself into the naturalist, evolutionary framework by simply positing spirituality as a product of evolution, in particular the evolution of mind/consciousness. As Wuketits (cited in Gitt, 1993:48) says, "physical structures and the corresponding psychological phenomena are two spheres which ... comprise different levels of complexity ... We may thus speak of a natural spiritual condition in the literary sense of the word." In fact, postmodern spirituality, in particular the New Age movement, takes the ideas of humanity's evolution to its logical conclusion; from 'nature to humanity to divinity' (Wilber, 1983:214). The New Age aim is to effect a further evolutionary step to higher, more exalted, even divine, forms of consciousness.

Postmodernism, including the New Age movement, regards the content of all religions as exclusively mythological, a social construction that is void of any claim to objective truth, but serves only to satisfy a psychological need that arose as a product of evolution (Anderson, 1990:257-258). In this way, human spirituality is reduced to "a mode of consciousness in which the individual feels connected to the cosmos as a whole" (Capra, 1990:410, 458) and God is reduced to the organisational dynamics of the cosmos (Capra, 1990:317), "the consciousness that manifests as *lila*, the play of the universe ... the organizing matrix ... which enlivens matter" (Ferguson, 1989:420). This is an essentially pantheistic view.

The progression from materialism to pantheism is logical. If one believes that the cosmos is the only reality, that there is nothing outside of the cosos, then the cosmos is already credited, even in materialism, with the attributes of God as a self-generated, self-sufficient entity which is the source of all existence. One has thus implicitly, even if not explicitly, already gone back to pantheism and nature religions (Jaki, 1989:201ff; Veith, 1987:110). Pantheism and atheism are, in fact, "logically equivalent, for the essence of their message is that there is no creator" (Clark, 1988:36). Quirk (2001:3), who is himself an atheist, recognises this: "Despite the apparent conflict in terminology naturalistic pantheism and atheism actually turn out to be natural mates, with agnosticism as an easily added component as well." The pantheist and the atheist both accept that the cosmos is the source of all that is, but the pantheist realises and acknowledges that this would render the cosmos divine and permeated with spiritual, divine energy which works in nature and is one with nature.

Pantheism is an essentially eastern view, but postmodern pantheism, in contemporary terminology, holism, differs from the eastern view in that postmodern pantheism/holism, in typically Western fashion, upholds the idea of human autonomy. Because human autonomy is upheld, the ultimate goal of Western, postmodern spiritual seekers differs substantially from the eastern goal. In the East the goal "is the loss (or transcendence) of personal identity in the One" (Osborn, 1992:123). In contrast thereto and in spite of the rhetoric against individualism, for example that of Capra (1990) and Wilber (1981, 1985), it is personal self-actualisation and self-fulfilment that are primarily sought by Western, postmodern spiritual seekers. This is clearly illustrated in the human potential movement (Horn, 1996:133).

Furthermore, although postmodern spiritualism is typically pantheistic in upholding a belief in one all-encompassing and all-pervading Mind/Spirit, it does not deny multiplicity (Osborn, 1992:124). This is done by stressing interconnectedness rather than undividedness. The Wiccan Starhawk (1989:39) expresses this idea: "All things are one, yet each is separate, individual, unique ... The world of separate things is the reflection of the One, the One is the reflection of the myriad separate things of the world. We are all 'swirls' of the same energy, yet each swirl is unique in its own

form and pattern." This same idea is expressed in the so-called creation-centred spirituality of the Dominican priest Matthew Fox (1983), as well as in the process thought of philosophers such as Alfred North Whitehead and Paul Tillich (Garrison, 1982:31ff). Whitehead and Tillich both influenced postmodern, New Age spiritualists (Ferguson, 1989:463).

Postmodern pantheism is *panentheistic*, which means that the two concepts God and the universe are distinguished between but not separated in essence. Panentheism claims that the divine energy, which Fox (1983) calls the 'original blessing', flows through everything, interconnects the multiplicity of nature and causes everything to strive for divine unity. Garrison (1982:46) explains that "panentheism is striving to overcome the classical duality that kept God and the world absolutely distinct ... and it is as strenuously attempting to maintain the diversity that allows genuine autonomy on both sides."

However, simultaneous autonomy for God and humans, that is, to regard both God and humans as a law (nomos) to self (autos), is a position which is logically impossible to uphold. Consequently, postmodern spiritualists uphold human autonomy and deny God's absolute autonomy by denying His objective existence. They accept Carl Jung's psychological theory, namely, that God and other spiritual beings are mental projections; subjective personifications of transpersonal intuitive forces that arise from the depths of the human psyche. This theory explains the Wiccan and feminist Starhawk's (1989:95) seemingly contradictory assertion that the goddess "exists, and we create Her." The influence of Carl Jung's psychological theory on postmodern spirituality is the subject of the next section.

2.3 Jung's psychological theory – spiritual but essentially naturalistic

The Swiss psychiatrist Carl Gustav Jung (1875-1961) was a man deeply interested in the mystical and the occult. Jung was in fact as much a metaphysician as he was a psychologist and he set up a bridge between psychology and religion (Mindess, 1988:66).

Jung (1969:139ff) posited the existence of three psychic levels: consciousness, the personal unconscious and the collective unconscious. Whereas the contents of the personal unconscious are individual and acquired during an individual's lifetime, Jung (1968:8, 1969:152) speculated that there was another level of the unconscious which was the deepest and with contents which were given at birth and common to all humans. He called this level the *collective unconscious*.

Jung (1969:158) theorised that within the collective unconscious and therefore within the psyche of each individual is "the whole spiritual heritage of mankind's evolution, born anew in the brain structure of every

individual." The spiritual history supposedly exists in the collective unconscious in the form of "mythological motifs or primordial images" (Jung, 1969:152) which Jung called the *archetypes*.

Jung (1969:133) defined the archetypes as "a priori, inborn forms of 'intuition," ... the necessary a priori determinants of all psychic processes." By definition, therefore, the archetypes are transpersonal, intuitive forces within the psyche. Jung believed that they "emerge into consciousness as universal ideas" (Jung, 1969:218) and that the common motifs encountered in religions and mythological folklore lent support to his notion of archetypes (Jung, 1970:449).

Jung's philosophical, epistemological position was essentially agnostic. He believed that even if a transcendent God existed, he could not be known (Jung, 1970:293). For Jung (1968:34) the truth about God was irrelevant since he maintained that the sole value in the idea of God was its power to evoke spiritual experiences. According to Jung (1967:369) the advantage of employing the term 'God' lay therein that it conferred life and effectual emotions on the contents of the unconscious with which the individual could intimately and with his total being relate in his/her development towards psychological wholeness.

Jung's psychology encouraged westerners to turn to other religions and to myths and fables for insight into the human condition (Drury, 1989:25) and also to agnosticism and religious relativism and the concomitant idea that *all* ideas of God are mental artefacts. Jung was, in fact, echoing the materialist Ludwig Feuerbach (1804-1872) who was the first modern thinker to clearly pronounce the idea that at the core of all religious representations of God are human images. According to Feuerbach (Raschke, Kirk & Taylor, 1977:8), religion is merely "the relation of man to himself, or more correctly to his own nature."

Naturalism, be it materialist or spiritualist, must by its very nature deny the reality of a God who exists objectively and as a truly personal Being whose attributes are independent of what anyone thinks about Him. When religion is refurbished from within the closed view of naturalism, which Jung did, the only conceivable conception of God is as a pantheistic and impersonal interconnecting Spiritual Energy (or Force) that can be personified if, and how, the believer chooses.

Furthermore, as already pointed out in section 2.2, postmodernists regard spirituality as a product of evolution and religious creeds are posited as mythological 'truths' which are upheld and taught in order to satisfy humanity's evolved psychological need for religion. Religion is thus posited as a human creation; mythical answers to meet a psychological need. However the Concise Oxford dictionary's definition for 'myth' is a 'purely fictional narrative'. In this regard, Alexander's (1972:110) comment is scathing. He says that this means that because humanity "has

a psychological need for a religion, then it should believe a lie to satisfy a need. This", he says, "would seem to be the worst kind of opium of the people."

For hard scientific support for their beliefs postmodern spiritualists turn to the new physics. This is the subject of the next section.

2.4 The new physics and postmodern spirituality

In eastern pantheism the physical world is ultimately a meaningless illusion (Veith, 1987:121). This illusory, nonreal view of physical reality, says Veith (1987:122), explains "why science and objective research as we know them in the West did not arise in Hindu or Buddhist cultures. They did not lack intelligence or analytical ability. They were simply not interested in the physical world as such."

Postmodern pantheism endorses the East's illusory view of physical reality. From the irrefutable fact that theoretical interpretation of data depends on one's perspective, postmodernists make the deduction - a deduction which is not logically necessary - that objective truth is impossible to attain and probably does not even exist (Rist, 2002:11). The subsequent postmodern philosophical and epistemological stance is idealist, in contemporary terminology, constructivist, and holds that all external reality is without an objective, knowable structure and therefore that which "we call the 'real world' is an ever-changing social creation" (Anderson, 1990:x). Postmodernists support their idealist stance with metaphysical extrapolations made from relativity theory and quantum physics.

Naturalism, be it materialist or spiritualist, is a closed worldview in which everything that exists falls within the confines of the cosmos. Thus, both materialists and spiritualists "seek the ground of all things within visible [that is, natural] reality itself" (Ouweneel, 1986:86). Postmodern spiritualists believe that the very essence of nature is spiritual energy, and this they believe was proved by Einstein's special theory of relativity's famous formula $E = mc^2$. (E denotes energy, m denotes mass and c denotes the speed of light.) Thus the postmodernist physicist and spiritualist Zukav (1979:177) claims that the cosmos's real existence is one of "dancing energy and transient, impermanent forms." Spirit is thus reduced to energy. Such reductionism is not logically necessary, but, since energy is an intangible part of the physical world, it is an understandable conclusion.

Furthermore, the energy of which the world is composed is held to be a chaotic conglomerate, empty of objective structure and therefore it becomes "what we choose to make it" (Zukav, 1979:54). Quantum physics supposedly supports this belief. In the early 20th century when physicists started investigating the nature of the subatomic (quantum)

realm, they were confronted with experimental situations in which the experimental apparatus influenced the behaviour of the observed phenomena. Bohr's interpretation, called the *Copenhagen Interpretation*, holds that the state of a quantum particle prior to observation is empty of real existence. This led to claims such as the following:

"The electron does not *have* objective properties independent of my mind" (Capra, 1990:77).

"Quantum mechanics ... leads to the possibility that our reality is what we choose to make it" (Zukay, 1979:54).

"The paradigm implied by the new physics is that there is no 'out there' reality ... In the paradigm of the new physics we have dreamed the world" (Talbot, 1981:135).

In this regard it must be mentioned that although the essence of matter is certainly energy, but physical not spiritual energy, the experimental quantum findings do not imply an unstructured, indeterminate world. Observation of the quantum level revealed only uncertainty in measurement and that there is as yet no detection apparatus available which does not influence quantum particles's behaviour. Quantum physics and its mathematical formulae express the state of the quantum realm *after*, *not prior to*, measurement. What the state of the quantum realm is prior to measurement is a question that physics at this stage cannot answer, and the reason is the fact that the apparatus used to observe the quantum realm also disturbs it. (Adler, 1990a:112-113, 1990b:98-99.) Observation of the quantum realm revealed nothing more than epistemological uncertainty, that is, uncertainty in the independent existence of the object perceived. (Lovejoy, 1955:364-365; Norris, 1997:189.)

In a naturalist framework, be it materialist or spiritualist, the quantum realm is not only the inner realm of matter but constitutes ultimate reality. For naturalists the quantum realm is therefore the springboard for philosophical, metaphysical theorising. The quantum physicist David Bohm's metaphysical theory is especially popular. For many, "he has become something of a guru or near-cult figure" (Weber, 1987:140). Bohm (1980:71ff) draws from the hypothetical experiment designed by Einstein, Podolsky and Rosen, called the EPR effect after its three designers.

Einstein, a philosophical realist, believed that quantum particles had definite properties prior to measurement which would eventually become technically accessible (Wilder, 1983:142). The EPR effect was conceived of in order to illustrate the incompleteness of quantum mechanics since its mathematics require the instantaneous, correlated change of two paired but separated quantum particles. For example, if two paired electrons of opposite spin are separated then quantum theory requires that if the spin

of one is changed artificially, the spin of the other changes simultaneously. This would require communication faster than the speed of light between the two electrons, a phenomenon which Einstein regarded as impossible since it contradicts the absolute speed of light posited in the special theory of relativity. Experimental evidence in favour of the EPR effect occurring has existed since 1957 and in 1982 it was unambiguously validated with light quanta by the French physicist, Alain Aspect, for distances up to 26 metres (Frost, 1992:142; Sharpe, 1990:107).

The materialist explanation is that natural frequency patterns and underlying nonlocal fields with superluminal communication explain quantum phenomena (Woodhouse, 1992:26, 44). Bohm (1980) has a different explanation. He explains the EPR effect and other paradoxical puzzles in quantum physics by proposing the existence of an implicate order underlying the quantum realm which enfolds within it the whole explicate order of space and time in a total wholeness and unity. His theory presents the universe as a holograph. A holograph is a three-dimensional photographic image in which "each part of the photograph can yield an image of whole object ... [light] waves from the whole object enter each region of the photograph, and so, ... information about the whole object is dynamically enfolded in each part of space, while this information is then unfolded in the image" (Bohm, 1986:24).

Because everything in the explicate order (the visible, macroscopic world) is vibratory frequencies that supposedly unfold out of the implicate (inner quantum) order, the universe, according to Bohm, is a seamless undivided whole, and every part contains enfolded within it the whole order of the universe.

An analogy with a computer programme is appropriate here. If the figures in a computer programme were sentient beings that instigated a scientific search for a unifying principle, they would ultimately arrive at the formulation of a similar implicate order theory, but this order is, in fact, nothing other than the software, that is, the programmer's instructions. In other words the implicate order has its origin in the transcendent, exogenous mind of the programmer. But to arrive at this fact, the computer figures would need to argue that an intelligent design requires an intelligent and *extrinsic* designer. Applied to the cosmos and human scientists's search for a unifying principle, this in actual fact supports the idea of an exogenous God who created a world intrinsically ordered in its variety and consistent in its inner interrelated patterns.

Bohm's implicate order theory was, in fact, grounded in his personal metaphysics. Eastern mysticism influenced him since childhood (Sharpe, 1990:113) and Krishnamurti, who was identified by Theosophists as the Lord Maitreya and the universal Christ of all people, was his friend and mentor (Frost, 1992:27, 160).

Postmodern spiritualists, in contrast to materialists, do not attribute the universe and the life it contains to random changes. After almost one hundred and fifty years of materialism theories such as Bohm's implicate order theory reveal the deep need in people for a spiritual order that provides life with a deeper meaning than mere physical survival and material well-being. However, the postmodern spiritual worldview merely spiritualises the evolutionary worldview of materialist science. For materialist evolutionists, mind "is merely the highest product of matter" (Engels in Gitt, 1993:48). For spiritual evolutionists, matter is the lowest form of spirit (Wilber-Smith, 1983:128-129). The shift from materialism to spiritualism is still within the metaphysical framework of evolutionary naturalism, and though the word 'God' is used it denotes merely an endogenous source and flow of energy. Moreover, in postmodern spiritualism such energy is posited as essentially unstructured. Its apparent structure is imposed by the human mind (see above claims made by Capra, Zukay and Talbot).

From the above it appears that the foundational premises of postmodern spirituality are macro-evolution, pantheism (holism), psychic interconnectedness, human autonomy and the mind-dependence of all reality (physical and spiritual). In the next section it shall be argued that these premises are based on subjective, unverifiable extrapolations of both verifiable and unverifiable theories proffered by scientists and that these premises either contradict one another (in other words, there is a lack of internal consistency) or they are denied by evidence.

3. A critique of the postmodern spiritual worldview

3.1 Subjectivism and religious/metaphysical extrapolations

Postmodern spirituality loses the distinction between the natural and the spiritual, and proven (the new physics) and unproven scientific hypotheses (evolutionary theory as well as psychological theories such as Jung's) are extrapolated to the metaphysical level, the justification of which is not the evidence, but is rooted in personal experience and subjective presuppositions (Chandler, 1988:247).

Theories posited by natural scientists to explain the difficulties with evolution are used to provide apparent scientific support for postmodern spiritual ideas, in particular the idea that humanity evolved and can thus evolve to higher, more exalted, even divine, forms of consciousness. One example is the Belgian chemist, mathematician and Nobel laureate, Ilya Prigogine's, theory of dissipative structures. Prigogine's theory was an attempt to solve the problems that the Second Law of Thermodynamics poses to evolution. This law states: The organised complexity/information of a structured/communicating system tends to become disorganised and random (Parker, 1982:165). Prigogine's suggestion is that:

(I)n a system where a high degree of energy dissipation is taking place, a small sub-region (a fluctuation) may exist where a higher degree of structure is somehow generated by the dissipative field. An example might be the generation of a trail of vortices in the wake behind an object around which a fluid is flowing rapidly ... In such instances, a large amount of energy is being dissipitated into nonusable heat in the large flow-through of energy, but in the process, order of a sort is developed in the vortex systems so produced. Prigogine's hope was that this sub-region of higher order might then provide the 'sub-strate' for the development of a still higher degree of order by a similar dissipative field through which it would pass – and so on, until living systems finally are generated (Parker, 1982:181).

Marilyn Ferguson (1989:176), a leading postmodern spiritualist, says: "Prigogine's theory resolves the fundamental riddle of how living things have been running uphill in a universe that is supposed to be running down." Prigogine's theory was, however, strictly mathematical and nonexperimental, and he self (Parker, 1982:180, 182) acknowledges that there exists no factual, scientific evidence that life originated and evolved by such means. Ferguson (1989:181) contends, however, that "Prigogine's theory was experimentally confirmed," by which she relates patterns formed in chemical solutions and oils to the design required for the origin of the first life from nonlife (Ferguson, 1989:178-179). But the former are meaningless, random patterns of organisation not information. There are two kinds of order or organisation. The one is the type produced naturally and randomly (for example, snowflakes and rock-formations). The other type of order implies an intelligent, extrinsic design (information) which is used to construct the desired order (Bradley & Thaxton, 1994:203ff). Furthermore: "There is little similarity between the ordering associated with crystals, vortices and the like and the specified complexity required in the sequencing of amino acids to give a functional protein [and ultimately lifel. Thus it is difficult to see how these ideas can resolve the information enigma that is at the heart of the origin-of-life mystery" (Bradley & Thaxton, 1994:195).

Ferguson (1989:182-183) uses the notion of fluctuations in a dissipative structure to explain the 'desirability' of introspective meditation for further evolution:

Brainwaves reflect fluctuations of energy ... In normal consciousness, small and rapid brainwaves (beta rhythm) dominate the EEG pattern in most people ... Meditation, reverie, relaxation, and other assorted psychotechnologies (techniques to induce altered states of consciousness) tend to increase the slower, larger brainwaves (alpha and theta) ... Inward attention, in other words, generates a larger fluctuation in the brain. In altered states of consciousness, fluctuations may reach a critical level, large enough

to provoke the shift into a higher level of organization ... Remember that small fluctuations in a dissipative structure are suppressed ... But larger fluctuations of *energy* (emphasis the author's) cannot be contained in the old structure. They set off ripples throughout the system, creating sudden new connections. Thus, old patterns are likeliest to change when maximally perturbed or shaken – activated in states of consciousness in which there is significant energy flow.

Ferguson's argument is self-defeating. Beta, alpha and theta refer to wavelength of which beta refers to the shortest wavelength. Alpha and theta, as Ferguson (see above) correctly points out, refer to longer wavelengths. What Ferguson does not seem to know is that the energy of a wave is *inversely* proportional to the wavelength. In other words, the longer the wavelength, the smaller the energy (as already taught in high school physics). In terms of Ferguson's reasoning, introspective meditation with longer wavelengths implies a lower state of energy than ordinary consciousness and would therefore *retard*, not promote, the alleged evolution to higher consciousness.

Another unproven evolutionary theory used to 'validate' a sudden evolutionary leap to higher levels of consciousness is the *punctuated equilibria* theory of the materialists Steven Gould and Niles Elredge (Ferguson, 1989:171-172). In order to explain the lack of intermediate forms in the fossil record, these two scientists propose that a new species emerges suddenly and fully formed. As the title of an article by Gould in *Natural History* for June-July 1977 says, this theory is *The return of hopeful monsters*. The hopeful monsters theory, formulated by Richard Goldschmidt in the 1930's, posited that, for example, the first bird hatched fully-formed out of a reptile egg. (Ankerberg & Weldon, 1994:281; Parker, 1982:111-112.)

The theories that are hitched onto are not presented as either unproven or that the evidence is open to other metaphysical interpretations. For example, quantum theory, as explained in section 2.4, does not unequivocally support the idea that reality, be it physical or spiritual, has no given, objective meaning. The genesis of the leading postmodern physicist and spiritualist Fritjof Capra's (1975:9) 'insight' into the new physics was not the data but a personal, mystical experience:

As I sat on that beach ... I 'saw' cascades of energy coming down from outer space, in which particles were created and destroyed in rhythmic pulses; I 'saw' the atoms of the elements and those of my body participating in this cosmic dance of energy; I felt its rhythm and I 'heard' its sound, and at that moment I knew that this was the Dance of Shiva, the Lord of Dancers worshipped by the Hindus.

As stated in section 2.4, the formula $E = mc^2$ certainly proves that matter is a form of energy, but Capra's deduction that physical and spiritual energy are one and the same was not a matter of experimental data but a genuinely metaphysical and completely subjective inference.

Subjectivity "is deeply reductive" (Collier, 2003:142). It collapses into philosophical idealism which questions whether the reality which we experience has its own existence independent of our perceptions. In this way reality is redefined and restricted to individuals's or groups's subjective, experiential world. Such a restriction on reality reduces knowledge, be it scientific or spiritual, to a creation of the mind (Collier, 2003:142). Thereby truth is reduced to viability where "concepts, models, theories, and so on are viable if they prove adequate in the contexts in which they were created" (Von Glasersfeld, 1995:7-8). In other words, internal coherence becomes the test for 'truth' (validity). But it is precisely such internal coherence that postmodern spirituality lacks.

3.2 The question of internal coherence

Turning to the issue of the postmodern spirituality's internal coherence one finds the following:

One: Insofar as postmodern spiritualists are holistic thinkers, they should renounce the notion of the world as a chaotic, unstructured conglomeration of energy. As Jaki (1989:165) points out: "A chaos can never be a whole, that is a coordination of parts, without ceasing to be a chaos, properly so-called."

Two: To claim that it is the human mind that, on the social or individual level, creates the world's wholeness is to appropriate god-like abilities for the human mind. However, the human mind is clearly not a divinely perfect instrument. Human experience is often chaotic and thus unreliable as the source for imputing order on chaos. Furthermore, and most important, is that a mind-dependent reality fails to fit with the idea of macro-evolution. If reality were contingent on the human mind, nothing could have existed in a concrete form prior to the appearance of *Homo sapiens* on earth (Adler, 1990a:91-92). Thus either macro-evolution or reality's mind-dependence is false, or both are false. Both cannot be true.

Three: To claim that all is one Mind manifested in every individual human mind, as is required in pantheism and panentheism, leaves no room for human autonomy of any kind. The idea of human autonomy is only consistent with the idea of many human minds, each of separate existence and such existence is not subject to the formative, creative powers of another human mind. Individual autonomy and psychic interconnectedness are concepts that are grounded in different and irreconcilable psychologies. The concept of an individual self is derived from the

Western, Judeo-Christian idea of a real, separate self that is not only physically but also psychically separate from others. The latter has no place in eastern psychology where "(i)t is not our (psychic) separateness that gives us reality, it is our (psychic) oneness ... From this it follows that individuals are not of special value at all. What is important is the whole, the One' (Sire 1988:12). Psychic interconnectedness requires a fused self-object representation. In Japan, for example, '[o]ne is not expected to function on one's own; one functions, intrapsychically, through the object and its symbols - family, community, company, state" (Masterson, 1985:100).

Four: Postmodernists such as Moffett (1992:29) believe that absolute individualism can breed its contradictory position, universalism. Moffett (1992:29) claims that as people develop autonomy and "inner strength, they draw closer to others farther away, because they rely less on those around them and seek bonds based less on blood and soil than on common humanity." Moffet's claim comes down to abstract love for humanity. In contrast thereto, the Bible calls on us to make morality and love for others personal and concrete (Veith, 1987:82). The Bible's command is to "Love thy neighbour" (Leviticus 19:18, Matthew 22:39, Mark 12:31, Luke 10:27). The wording enjoins us to love all other persons as individuals, be they blood-related or of the same or other societies and religions, as the parable of the Good Samaritan teaches (Luke 10:25-37). The Bible does not command impersonal and abstract love of the human race. It is easy to love humanity in the abstract. In this regard, Dostoievsky (Alexander, 1972:117) points out: "Abstract love of humanity is nearly always egoism."

Five: All humans desire to be treated honourably and, in fact, westerners claim respectful treatment as a human right. However, in an evolutionary and/or pantheistic framework the difference between humans and the rest of nature is not a difference in kind, but a difference in the degree of aware consciousness. In this regard, the philosopher Mortimer Adler (1993) argues that the premise that grounds respect for human worth and human dignity lies in the affirmation that humanity is a species that differs in kind and not merely in degree from the rest of nature. Without this affirmation,

a sharp line cannot be drawn to separate the world of persons from the world of things; in fact, the distinction between person and thing becomes meaningless or at best arbitrary if there are only differences in degree, since that distinction is either a distinction in kind or no distinction at all ... [I]f men [humans] and other animals differ only in degree, the whole distinction between person and thing evaporates and we are left with no argument of this sort to justify our differential treatment of men [humans] (Adler, 1993:257-258).

Without a clear distinction between humans and the rest of nature, 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 one "would then be forced to treat the problem as one of pure expediency, totally outside the pale of right and wrong" (Adler, 1993:267). Thus, in an evolutionary and/or pantheistic framework human rights are, in fact, meaningless.

Six: Postmodern spiritualists claim that the world was desacralised and despiritualised by the negative forces that were generated by the rationalism, individualism, materialism and secularism of the era of modernity (Capra, 1990:37ff, 93ff). Their vision is to reactivate an awareness of the spiritual. This is a laudable aim. However, it is combined with a conception of God as a mental artefact. Such a conception of God is a dangerous one. Nietzsche, in the nineteenth century, realised that when God is regarded as dead, that is, empty of real, objective existence, then what follows is the will-to-power, moral nihilism, the 'superman' and the deification of humanity (Alexander, 1972:105; Cotta, 1985:103).

Seven: The practice of natural science is inconsistent with pantheism. Pantheism collapses the distinction between God and the universe, and for natural science this cut is crucial. Without it all of nature becomes sacred, and science as the empirical investigation of nature becomes taboo "lest one blaspheme something holy" (Veith, 1987:120). Moreover, when the character of the cosmic manifold excludes the factor of objective realness, natural science is transformed from a rational, empirical investigation of a real world into a mystical, personal, experiential investigation of an illusory world. All that is left of the pursuit for knowledge is the mystical contemplation of divine oneness, the understanding of which will supposedly release the psyche's powers to magically manipulate the spiritual order enfolded in the holographic illusion (Talbot, 1981). In this regard Zukav (1979:327) suggests: "It is possible that physics curricula of the twenty-first century include classes in meditation."

Eight: Social and ecological concern are important postmodern values, but such concern is meaningless in a mind-dependent reality. As Bickhard (1995:241) comments: "[C]oncerns with [military] arms and pollution seem curiously inconsistent with holding that there is no 'real world that is separate from one's experiences of it'". In a world which is a mental artefact it is not absurd nor impossible to overcome problems by simply changing one's perspective and exercising the mind's alleged creative power in order to construct reality in a more desirable form. If there were no facts and no reality that exist in complete independence of mental theories, if reality and knowledge were simply what an individual or a society says they are, the real complexity of subjects such as mathematics could be simplified. Thus, Bickhard (1995:257) asks: "Wouldn't our world be much simpler if pi (π) simply equaled the integer 3? Is that question absurd? How, within a social (or radical, individual) idealism, is it absurd?"

In the next section the question of the postmodern spiritual worldview's consistency with factual evidence will be addressed.

3.3 The question of consistency with evidence

With regard to the question of the postmodern spiritual worldview's consistency with evidence, one finds the following:

One: Postmodernists such as Ferguson (1989:104) and Moffet (1992:9) maintain that psychic interconnectedness is reconcilable with selves who are "fiercely autonomous" (Ferguson, 1989:104). However, modern Japanese parent-child relationships provide evidence that these are mutually exclusive psychological concepts. In Japan, self-object fusion is inculcated via an education that emphasises feelings of shame. However, this only starts at age five or six years. Prior to that education is extremely indulgent and child-centred. (Masterson, 1985:96.) At the age of five or six years, the Japanese "mother reverses course in order to socialize the child and uses the emotion of shame to get him or her to control the external expression of infantile grandiosity and narcissism ... Shame thus became the key affect of Japanese culture ... grandiosity and selfcenteredness cannot be directly and openly expressed, but must find expression through the other person or group" (Masterson, 1985:96-97). The Western emphasis on individual autonomy is, however, impacting on Japanese youth, but this is occurring without a change in the early indulgent education that promotes rather than overcomes the narcissistic grandiosity which is characteristic of infants. Thus, when the child is older and the parents attempt to inculcate shame, Western influenced Japanese children reject the sacrificial functioning of a fused self-other representation and instead act out their anger if and when the parents attempt to frustrate their wants. Such attacks, says Masterson (1985:101-102), are "not healthy self-assertion ... (but) the acting out of frustrated narcissistic rage." Healthy self-assertion is a characteristic of a self who is independent whilst also having overcome the narcissistic grandiosity of infants. This calls for the following early childhood education: On the one hand, the infantile "grandiose self must be defused, deflated and brought into reality or down to earth, so to speak, by phase-appropriate frustration at the hands of the mother" and, on the other hand, the emerging self must be acknowledged and supported (Masterson, 1985:96).

Two: Technology clearly refutes the world's mind-dependence. A description of the workings of nature in mathematical form is at the heart of physics. That such a description reflects the facts about an objectively structured world free from core contradictions "is assured ... by the way in which technologically contrived devices work or fail to work. Technology is not magic, as it would be in the world of the philosophical idealist" (Adler, 1990b:74). Technological devices work consistently, bar mecha-

nical failure, because the physics and the mathematical formulae underlying the devices correspond to an objective reality; not because the mind magically wills either the device to work or reality to conform to the device. Because the world is real, it appears that a synthesis between science and religion requires two interrelated propositions: The first is that God and the spiritual domain are as objective and mind-independent as technology proves that the physical world is. The second is that God and other spiritual beings are separate from nature, although Deism is not necessary. It can certainly be accepted that God is in active relationship with the universe and that He upholds and sustains it.

Three: In a mind-dependent world, thought processes would be actualised, but actualisation of thought requires multiple worlds where each world exists in complete independence of the others. This contradicts Bell's theorem and its experimental validation (Casti, 1989;490) from which Bohm derived the idea of a holographic universe. Furthermore, it contradicts the premise of pantheist/holistic interconnectedness. To retain interconnectedness, postmodern spiritualists who use Bohm's theory should do as Bohm did, namely acknowledge the possibility of superluminal communication in a single world of implicate order (Casti, 1989:474). Bohm's analogy of a holographic universe may imply an illusory universe, but it does not imply an intrinsically chaotic and minddependent universe. Bohm may possibly have arrived at the specific idea of a holograph because, although in science he was a realist and refuted the idea of a mind-dependent universe (Wilber, 1983:145-146), he also had a propensity for Eastern metaphysics (see above section 2.4). Even though illusory, a holograph is nevertheless structured; a structure which is not the product of the observer's mind, but is derived from the original object which it reflects. Furthermore, the original object stands apart from its holographic image. As an analogy of God's relationship with the world, a holographic universe implies therefore a universe that is separate from God, yet the whole universe reflects in some albeit imperfect way the nature of God. And since the working of technology proves that the universe is objectively real and mind-independent it means that God is also objectively real and mind-independent.

Four: Postmodernists themselves, their everyday behaviour and lifechoices, belie their denial of objective truth. The following example, borrowed from Adler (1990b:75-76), illustrates what happens if postmodernists do not keep factual scientific truth about reality separate from their philosophical, religious views on reality: Imagine that a postmodernist were offered a choice between two planes, one which is fast and comfortable but aeronautically questionable, and one which is slow and uncomfortable but aeronautically sound. In *conformance* with the teaching that reality is mind-dependent, the *consistent* choice would be the former plane. Choosing the latter plane means that the postmodernist is

unwilling to put his/her foundational teaching about reality to the test which, in effect, constitutes a denial thereof. In other words, postmodernists "operate with a selective suspension of belief in reality ... (When philosophising) ... they have to suspend their belief in reality ... (but they) look both ways before crossing the street" (Hoyt, 1987:181-182).

4. Conclusion

The above analysis of the worldview that issues forth from evolutionism and the denial of objective religious truth – the paradigmatic presuppositions prescribed for South African education – showed that this worldview is of debatable validity. This, on its own, makes the imposition of the undergirding presuppositions as framework for South African education morally indefensible. However, the worldview in question is also unbiblical. Religious freedom is stipulated as a right in the Bill of Rights in South Africa's Constitution and is also stipulated as a children's right in the United Nation's *Convention on the Rights of the Child*, which the General Assembly of the UN accepted in November 1989 and South Africa ratified on 16 June 1995. Therefore, in the classroom these presuppositions should be examined and revealed for what they are, namely, unverifiable assumptions that require faith for their acceptance.

With regard to evolutionism, intellectual honesty demands that students also be presented with alternative logical interpretations of scientific data which have a bearing on the question of the origin of the universe and the life it contains. The fact that all theories on origins are a matter of faith should be acknowledged. Evolution should not be taught as fact because the data on which it is based can be interpreted in a different but also logical way, a way that rejects naturalism and presupposes the truth of Genesis 1 and 2. Students should learn that presuppositions always determine the path of reasoning and that scientists always interpret evidence in terms of presuppositions. Therefore, if the presuppositions of scientists differ then their interpretations of evidence will also differ. By teaching children to delve into the presuppositions undergirding theories about origins (and other untestable matters), they will learn the importance of forming *informed* opinions rather than simply endorsing the accepted, majority opinion. Children must learn that true critical thinkers are people who strive to discover truth and they value truth above majority opinion and group acceptance.

With regard to the denial of objective religious truth, the fact that public schools in a plural society must serve a multitude of religions can be addressed, on the one hand, by releasing children at certain convenient times during the week so that the parents in conjunction with their religious communities may provide for their religious education and, on the other

hand, teaching through ethos and example, good character based on the basic virtues of altruism, namely, honesty, responsibility, kindness, respect for other people and their property, a sense of fair play, and so forth, which all responsible religions and secular philosophies recognise and teach.

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