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'HOPE FOR THE EARTH?' Discerning the cosmic depths of despair

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1. An eschatological approach to ecological theology

The aim of this paper is to lay the foundations for a larger research project on *Hope for the earth? Eschatology, cosmology, and ecology* in which I hope to explore the viability of an eschatological model for an ecological theology, spirituality and praxis (in South Africa).

The notion of an eschatological approach to ecological theology is based on a very helpful typology[1] suggested by John Haught. He has identified three major approaches to an ecological theology, i.e. an apologetic, a sacramental and an eschatological approach. Since I have discussed this typology elsewhere,[2] the argument may simply be summarised here:

a. An *apologetic approach* relates to an attempt to retrieve the notion of a more harmonious relationship between humanity and nature from the Biblical roots of Christianity and from the subsequent history of Christianity. The thrust of this model is to move beyond a theology of dominion understood as domination towards a theology of stewardship. Human beings should be regarded as the stewards, caretakers, priests, custodians or guardians of creation who have the task of 'tending the garden' with wisdom and respect.[3] Haught argues that the vast majority of

1 Various typologies for an ecological theology which would empower a Christian environmental praxis have been proposed in recent literature. Haught's typology, like all other typologies, fulfills a heuristic function but also distorts some of the represent literature. Haught's typology, like all other typologies, fulfills a heuristic function but also distorts some of the represent literature. Haught's typology, like all other typologies, fulfills a heuristic function but also distorts some of the represent literature. Haught's typology, like all other typologies, fulfills a heuristic function but also distorts some of the represent literature. Haught's typology, like all other typologies, fulfills a heuristic function but also distorts some of the representetween the position of humanity, 1) as despots over nature, 2) as having dominion over nature, 3) as being stewards of God to nature, 4) as being subordinate to nature, and 5) as participating in God's nature. Northcott (1996:124f) suggests another typology that distinguishes between humanocentric, theocentric and ecocentric approaches. See also the less interpretative typology by Parker & Richards (1996) who simply distinguish between contributions from denominational and ecumenical theologians, liberation theologians (including Latin American, ecofeminist/ecowomanist and indigenous theologians), process theologians and official church declarations.

2 See Conradie (1997).

3 This theology of stewardship has often come under criticism. The notion of stewardship is regarded as a too managerial and androcentric concept to support the ecological ethos and vision of the place of humanity in creation which is needed today (Granberg-Michaelson 1990:12). According to the metaphor of stewardship, God seems to be viewed as an absentee landlord who has put human beings in charge of the master's property (McDonagh 1994:130). Alternatively, this task to govern and order nature wisely is modelled on that of a benevolent monarch or patriarch. It assumes human supremacy among the species. Even though the emphasis is on responsibility instead of domination, the management model assumes that we as human beings know best. Furthermore, the notion of stewardship assumes a *relationship between* humanity and nature. By contrast, the story of the universe emerging from the astrophysical and biological sciences have reminded us that humans beings are simply an integral part of nature (and the evolution of natural ecosystems). Natural ecosystems have existed prolifically for billions of years without human assistance. The theology of dominion or stewardship fails to accentuate that we belong to the earth more than it belongs to us, that we are more dependent on it than it is on us, that we are *of* the earth and not living *on* the earth (Haught 1993:101).

Christian theologians follows such an apologetic approach.

b. A *sacramental approach* explores the interrelatedness of human beings and nature. Whereas the apologetic approach would emphasise the relationship between human beings and nature, the sacramental approach sacralises the unity of humanity with nature. It regards nature as something sacred, a place where the presence of the divine may be experienced (thus sacramental). Human beings are called to respect and celebrate this sacredness. Haught cites the creation spirituality of Thomas Berry and Matthew Fox, various expressions of ecofeminism, indigenous theologies and deep ecology as examples of such a sacramental approach.

   Although this sacramental approach is theologically often quite radical, its environmental ethos remains curiously conservative. Its main thrust is to retrieve and to return to a sacralisation of nature. This seems to be regarded as the last best hope for the preservation of ecosystems amidst the onslaught of the late capitalist industrial economic order.

   Haught also points out that societies for whom nature was or still is sacred have nonetheless destroyed their natural habitation throughout the centuries. In this sense a sacramental approach can be somewhat naive and perhaps too romantic. According to Haught a purely sacramental approach cannot easily accommodate the shadow side of nature[4] (including the sins of humanity as a particular part of nature). The model of sacramentalism may mask the unequal and corrupted relations of power within ecosystems.

c. Haught proposes an eschatological approach to ecological theology. Instead of a retrieval of ecological wisdom from former cultures, he calls for a transformation of an ecological vision towards the future. Any adequate ecological theology must be future orientated. The basic intuition of an eschatological approach is that a Christian environmental praxis can only be empowered on the basis of an adequate understanding of Christian hope. Despair in the face of the environmental crisis will inevitably lead to a spirit of resignation.

   Haught argues that the eschatological dimension of the prophetic tradition in Christianity and its characteristic emphasis on hope could perhaps form the distinctive contribution of Christianity to a global ecological vision (the other religious traditions emphasise the sacredness of nature as well). The orientation towards a vision of the future in the light of God's promises in the Christian (prophetic) tradition (and not only the notion of protective sacredness) may be vital for an ecological spirituality and praxis.[5] Haught cites the theology of Jürgen Moltmann, the evolutionary cosmology of

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Despite this criticism, the value of the notion of stewardship should not be denied. Nash (1991:107) insists that an ecological commitment is far more important than verbal purity. Rasmussen (1996:236) senses that there is at least a shared consensus in the debates on the motif of stewardship that 1) human beings do not own the earth and 2) that 'the earth is the Lord's.'

4 Haught (1993:111). McFague (1993:71) also argues that the creation spirituality of Berry and Fox cannot do justice to the sense of oppression and injustice that is part of the awesome mystery of life on earth. There is an ungrounded evolutionary optimism which is perhaps due to the attempt to replace the hegemony of a fall/redemption theology by an emphasis on creation theology (only). Nevertheless, creation spirituality presents a utopian, eschatological vision not of how things are but how they should be.

5 An eschatological approach to an ecological theology is not without some serious pitfalls. For many, biblical eschatology, with its unleashing of a dream of future perfection, is inimical to environmental concerns. It harbours the danger of strengthening the myth of progress. Some critics sense in the prophetic vision of a better future an ecologically dangerous feature of Christianity. See Haught (1993:106).

Teilhard de Chardin and (his own notion of) process theology as examples of such an eschatological approach to ecological theology.

Haught's own constructive contributions is not of immediate relevance here. My primary concern is to explore, on the basis of this analysis and by means of a larger collaborative research project, the viability of such an eschatological approach to an ecological theology and a Christian environmental praxis in South Africa.

2. Hope for the earth?

Haught's criticisms of the apologetic and sacramental approaches and his contention that an environmental praxis could be empowered by Christian hope seem, to my mind, quite persuasive.[6] Without any hope, without any vision of a future for the earth itself, an environmental praxis will soon loose its impetus. It will consciously be fighting a loosing battle. There is, for example, no need for endlessly renewable resources if the earth is soon coming to an end anyway.[7] If life becomes a struggle for basic survival, no theology of stewardship or cosmic sacredness will be able to resist environmental destruction. Only where there is hope, can life become meaningful.[8]

One of the results of the environmental crisis is that it has led to exactly such a widespread sense of despair. David Hallman comments that, 'The problems of ecological destruction and global poverty are certainly of a magnitude and intractability to elicit unmitigated despair.'[9] Indeed, 'Hopelessness is the greatest killer - of joy, of initiative, of loving concern, of social and ecological responsibility, even of physical life'.[10]

The question therefore seems to be: Where can a vision of hope be found amidst such a sense of environmental despair? In what way could this hope include a sense of hope for the earth itself?[11] What hope is there ultimately for us as human beings? Is the Christian hope one of salvation for human beings *from* the earth[12] or does it include some vision of hope

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6 Despite the (valid) criticisms which could be raised regarding the apologetic and sacramental approaches, these three models of ecological theology may be compatible with one another. All three these models provide a distinct theological rationale for caring for the earth, but the focus of each approach is different. The sacramental approach emphasises that the earth is a sacred gift from God (in the past) which should therefore be treated with due respect. The eschatological approach emphasises a vision of the future of the earth in God's presence. This vision serves as an inspiration for an environmental praxis in the present. Such an environmental praxis is guided by the conviction that 'the earth is the Lord's' and may be described with concepts like stewardship, gardening or earthkeeping.

7 Keller (1997:87).

8 Images of the future has long been recognized as the one of the crucial building blocks of comprehensive worldviews. In portraying the place of human beings in the world, religious cosmologies not only describe the origins of the universe but also its destiny. These images of the future expresses that which has ultimate significance for people and form the basis of values and attitudes and the choices people make (Olivier 1989:29). Images of hope for the future are crucial for the kind of choice orientated behaviour needed for environmental praxis.

9 Hallman (1994:8). He immediately adds that what emerges from literature on the environment is often not resignation but an astonishing conviction, vision, celebration, humour and hope. For one example of such a vibrant sense of hope in a context of poverty and misery, see Ortega (1989).

10 Nürnberger (1994:148).

11 Santmire (1989:267) comments that '... no single theologian has yet explored the implications of the theology of hope substantively for the 'theology of the earth,' that is, the biophysical world, the cosmos, or nature.'

12 Granberg-Michaelson (1982:23) uses the very apt image of a helicopter (God's work in Jesus Christ) hovering over a burning and sinking ship (the earth) in order to rescue the crew (human beings only) to safety (heaven one day). With reference to John 3:16-17, Granberg-Michaelson insists that God's loving care includes the whole cosmos. The sinking ship itself must be rescued.

for the earth itself?[13] And how can such a vision of Christian hope inform and empower an environmental praxis and spirituality?

There is, in other words, a need within a 'theology of hope' (Moltmann) to gain clarity on the continuity and discontinuity in the complex relationships between *kosmos* and *eschaton*, between present salvation and final consumation, between this earth and the 'new heaven and the new earth', between our human bodies and the Christian hope for the resurrection of the body, between the finite life *on* earth (as well as the finite life *of* the earth) and the Christian hope for 'life everlasting', between the finite dimensions of space and time and God's presence in eternity.

These questions form the heart of an inquiry into the viability of an eschatological approach to ecological theology. They also set the agenda of the larger research project that I have envisaged and require a thorough investigation of the meaning, content and scope of Christian hope.

In order to embark on such an endeavour, it is perhaps advisable to first investigate the cosmic depths of despair in more detail. Christian eschatology should guard against the temptation of selling cheap forms of hope. Whereas cheap grace may undermine the integrity of the gospel, cheap hope will inevitably undermine its plausibility. This happens whenever Christian hope becomes unrelated to the future of the earth, society and individual human beings, and therefore uninspiring for the present.[14] Such forms of hope cannot empower an environmental praxis in the world in which we live. It may elicit some form of hope but such hope will remain futile, in vain and escapist.

The rest of this paper will therefore focus on an assessment of the problem of despair. It will investigate the available evidence[15] supporting this sense of despair in its cosmic, planetary, environmental, South African and more personal dimensions.

3. Cosmic dimensions of despair

The task of scientific and theological cosmologies alike is to reflect not only on the origins of the universe but also on its destiny.[16] The future of the universe has been the subject of an ongoing debate in scientific discourse.[17]

The debate hinges on the question whether the expansion of the universe which began with the 'Big Bang' will go on permanently (to die a 'cold death' of entropy) or whether it

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13 See Moltmann (1996:259): 'Christian eschatology must be broadened out into cosmic eschatology, for otherwise it becomes a gnostic doctrine of redemption, and is bound to teach, no longer the redemption of the world but a redemption from the world, no longer the redemption of the body but a deliverance of the soul from the body.'

14 See Schuurman (1987:43) for a similar criticism of Moltmann's eschatology.

15 A more optimistic construction of the evidence could also be made. This paper remains deliberately one-sided in that it will only investigate the evidence supporting a sense of despair.

16 Most of the reflections on cosmology within the religion-science debates have been focussed on the origins and the history of the cosmos and the place of humanity within this history. The questions concerning the *destiny* of the universe have received comparatively little attention. Tracy (1994:77) insists that: 'The questions of cosmology are not properly understood as *only* concerned with the origin and natural structure of the world. Those cosmological questions include the destiny of the world as well - including the destiny of human beings, indeed of history itself - as 'inextricably bound up' with the destiny of the cosmos.'

17 A number of popular books have recently been published on the future of the universe (i.e. 'scientific eschatology'). See, e.g. the quite accessible overviews by Davies (1994), Hawking (1988:42f). See also the discussions from a theological perspective by Haught (1993:11f), Körtner (1995:146f), Küng (1993:162f), Pannenberg (19??:146f), Peacocke (1979:319f), Peters (1989:51f), Ruether (1992:40f), Worthing (1996:160-198).

would one day be braked into a standstill and then enter in a phase of contraction with increasingly hot temperatures that would finally bring it to a singularity similar to the beginning, a point of unlimited density and compression.[18] In other words: Will the universe eventually become *fried* or *frozen*?[19]

According to the first theory, the generation of new galaxies, stars, 'black holes' and 'white dwarfs' will eventually come to an end. The destiny of the universe is governed by the second law of thermodynamics: all forms of energy will eventually be reduced to a state of entropy. Everything will finally burn to ashes. The protons and neutrons that make up all matter will become destabilised and will eventually disintegrate, perhaps after more than 10^{32} years.[20] Hans Küng comments: 'Cold will slowly enter the cosmos: death, silence, absolute night.'[21] The universe will end, not with a bang but with a whimper.[22] Or, in the words of Paul Davies: 'The final feeble resources of free energy will be exhausted, the whole cosmic machine will have run down to a standstill and the second law of thermodynamics will have claimed its last victims.'[23]

According to the second theory, the expansion of the cosmic explosion of the 'Big Bang' will eventually end (perhaps after another 40-50 billion years) and then slowly turn into a contraction. After 80 or 100 million years the universe will be its present size again.[24] In a process lasting billions of years, the universe will implode at an increasingly rapid pace and at infinitely hot temperatures. This will lead to the so called 'Big Crunch' during which a complete dissolution of atoms and atomic nuclei will take place. The universe will literally end in something like a huge black hole. Indeed, black holes provide a foretaste of this universal annihilation. Stephen Hawking's comment on black holes applies to such a cosmic catastrophe as well: 'All hope abandon, ye who enter here.'[25]

There is a further, highly speculative, possibility that a completely new world, perhaps with a new set of physical laws, may come into being after the Big Crunch (e.g. a 'Big Bounce'). Or perhaps, as some speculate, our universe may already be the product of a second or third 'Big Crunch.'[26] However, if this cycle of expansion and collapse continues *ad infinitum* (?!), these successive cycles of an oscillating universe may finally also die the cold death of entropy.[27]

The critical factor in scientific discussions of these two theories, is the density of mass necessary to slow and stop the process of expansion. If the critical mass density exceeds 10^{-29} grams/cubic centimeter, then gravitational pull will draw everything together again. The available scientific evidence indicates that the density of mass in the universe is too sparse

18 Pannenberg (19??:158).

19 Russell (1994:559). For a discussion of the possibility of a third option, i.e. that of a 'flat universe' in which the universe is expanding at precisely the rate necessary to avoid eventual collapse, see Hawking (1988), Worthing (1996:183-185).

20 Peters (1989:53).

21 Küng (1984:251, 1993:164).

22 Ruether (1992:42).

23 Quoted in Peacocke (1979:327).

24 The time scale for this process may also be much larger, even trillions of years (see Davies 1994:119f).

25 See Hawking (1988:94). The reference to Dante's comment on the entrance to Hell reminds one of the stark contrast between this universal annihilation and any form of hope expressed in Christian eschatology.

26 Worthing (1996:190) adds that the idea of a cyclic universe itself is very old, going back to the ancient civilizations in Greece, China and Egypt. It can also find early theological support in the writings of Origen.

27 If, on the other hand, these cycles of an oscillating universe are indeed endless, a comparison with the myth of Sisyphus will be in order: the repetitive cycles of universe will again be futile. See Worthing (1996:188).

by a factor of ten or a hundred. However, there may be a quantity of unseen matter (dead stars, interstellar dust, galactic holes, black holes, sub-atomic particles, etc.). The debate between these two theories therefore remains unresolved.[28]

Both the alternatives of a 'cold' or a 'hot' death to the universe are catastrophic and will indeed constitute the end of the universe as we know it.[29] The unpalatable truth appears to be that the inexorable disintegration of the universe is assured.[30] John Haught concludes that the weight of evidence emerging from the (cosmological) sciences is clearly on the side of what he calls 'cosmic pessimism'.[31] Cosmic pessimism is the conviction that the world has no transcendent origin and no divinely shaped destiny.[32] According to this worldview the final destiny of the physical universe is the void of utter meaninglessness. We live in a pointless universe, one that lacks any telos, any ultimate purpose. Or, in the words of James Trefil:

> At some distant time in the future, the universe will be a cold, thin, expanding sea of radiation, with a few forlorn particles to break the monotony. Perhaps it was this gloomy prospect that caused Stephen Weinberg to remark, 'The more the universe seems comprehensible, the more it also seems pointless.'[33]

This sense of cosmic pessimism is exemplified by the gloom of the second law of thermodynamics. Sallie McFague explains that the laws of thermodynamics form the basic household rules (= *oikos-logos*) governing our planetary home. They describe the basic energy processes on the planet. The first law states that while energy can be converted from one form to another, the *quantity* of energy in a closed system will remain the same. The second law holds that the *quality* of energy will decrease (or, at best, remain more or less the same) through any such conversions of heat to do useful work. The available energy will tend towards increasing randomness and disorder (entropy). While some areas within a system may temporarily become more ordered, this will be at the cost of more disorder somewhere else in the system. Since this increasing entropy is a one-way process the second law seems to confirm the most pessimist of worldviews: everything will die a cold death of total entropy. The cosmological consequence of this law therefore seems to evoke complete hopelessness. It leads to an utter elimination of history, leaving no hope whatsoever.[34]

It has to be remembered that these laws of thermodynamics only apply within a closed

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28 See Peters (1989:52), Worthing (1996:162f).

29 By contrast, the Christian eschaton is usually understood as a *transition* to a new era (a 'new heaven and a new earth') and not as an *absolute end* of the universe. Karl Peters therefore concludes that biblical eschatology and current scientific theories cannot be reconciled easily: 'If the expanding universe is indeed open, expanding forever, then how can we speak of God recreating the universe? If the universe is closed, then it is likely to end in a 'big crunch' of mammoth black-hole proportion. Again, it is difficult to see how a new creation can take place.' (quoted in Worthing 1996:176).

30 Peacocke (1979:329).

31 Haught (1993:14). He argues that this cosmic pessimism is rooted in a scientific materialism, i.e. the contention that everything is ultimately reducible to chemistry and physics, that 'matter' (however mysteriously nuanced this concept may have become in modern physics) is alone the sole author and substance of all that is real. He points out that recent developments in the sciences, especially in physics, have challenged many of the assumptions on which scientific materialism is based. Nevertheless, many scientists still assume that we can explain (human) life and thought adequately in terms of chemical activity.

32 Haught (1993:17).

33 Quoted in Peters (1989:53).

34 Körtner (1995:147).

system.[35] The earth is, for example, not a closed system since it is constantly being penetrated by energy from the sun. This heat is, of course, extremely useful and through the processes of photosynthesis[36] provides the energy on which all forms of life on earth is based. (This 'good news' about a seemingly inexhaustible source of energy does not lessen the importance of the finitude of planetary resources and the limits to the planet's ability to absorb waste products.[37]) Nonetheless, the entropy of the whole earth-sun system is certainly increasing.

The more important question is whether the second law applies to the universe itself. It is possible, although still unlikely, that not even the first law of thermodynamics would necessarily apply to the universe as a whole. The universe (*qua* universe) may or may not operate like a closed system.[38] Nevertheless, the pessimism if not nihilism associated to the second law seems to dominate both scientific theories and the popular imagination concerning the destiny of the universe, i.e. that the universe will ultimately die a senseless death.[39]

Haught insists that such a worldview cannot support an environmental ethos and vision.[40] He comments: 'If the final wreck and absolute extinction is the last word about the universe, then why seek now to preserve it against the inevitable void that seems to be its destiny?'[41] The question is therefore whether anything is worth saving and protecting if reality is, in the final analysis, devoid of any hope. Does it make any sense to care for nature if the cosmos itself seems to be intent on its own annihilation?

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Haught's own response to this cosmic pessimism is interesting but not of immediately relevant here. He argues that the material base of nature is much more unpredictable than earlier scientists have assumed. Curiously enough, the scientific awareness of our ignorance has grown in parallel with, indeed faster, than the growth in our knowledge.[42] The coming into being of the seemingly stable laws of the physical universe is part of the story of the cosmos. Haught says: 'Science has increasingly and almost in spite of itself taken on the lineaments of a story of the cosmos. The cosmos itself increasingly becomes a narrative, a

35 See Toulmin (1982) for a thorough investigation of the significance of this argument.

36 A new awareness of the dependency of human beings on plants has emerged in recent literature. As McFague (1993:106) puts it: 'the plants can do very nicely without us, in fact better, but we would quickly perish without them.'

37 See Rasmussen (1975).

38 See the extensive argument on this problem by Toulmin (1989).

39 See note 55 below on the more optimistic, if speculative, scenarios by scientists like Freeman Dyson and Frank Tipler.

40 Haught (1990:166, 1993:24f) mentions the irony that many cosmic pessimists, scientists who despair about any meaningful cosmic destiny, are nevertheless ardent supporters of environmental reform. To these thinkers, the very indifference and precariousness of the universe at large makes the local domain of life on earth in all its perishability all the more worthy of preservation. In fact, Haught argues, 'Too much trust in an ultimate cosmic purpose might diminish our spontaneous respect for the delicacy of living forms to which evolution has unconsciously and painfully given birth on our insignificant planet' (1990:167). However, such a tragic sense of cosmic pessimism seems to undermine a vision which could support an environmental praxis in the long run (1993:23f). If the advocates of cosmic nihilism support environmental causes it is probably because of their moral and aesthetic sensitivity but despite their materialist worldview.

41 Haught (1993:24).

42 Peacocke (1993:31).

great adventure ... The most expressive metaphor for what science finds in nature is no longer *law*, but *story*.'[43] The story of the universe is the result of a complex interplay between chance and law.[44] If the history of the cosmos resembles an adventure story more than a set of eternal laws, Haught feels justified in speaking of the 'promise of nature' itself. Nature and reality itself has its own inherent teleology; it is 'seeded' and 'saturated' with promise. The cosmos seems to share in the hopes of humanity: 'Billions of years before our own appearance in evolution it was already seeded with promise. Our own religious longing for future fulfillment, therefore, is not a violation but a blossoming of this promise.'[45]

Christian eschatology resonates with this 'promise of nature'[46] and provides a clue to the ultimate meaning of this cosmic story. The authentic life of Christian faith and hope is one of looking to the fulfillment of God's promise, based on the experience and trust in God as a promise keeper (e.g. the fulfillment of God's promises in Jesus Christ).[47] For Haught, an environmental ethos is based on this Christian hope. To destroy nature is to turn away from a promise.[48]

4. Planetary dimensions of despair

While the ultimate destiny of the universe may be in dispute, the destiny of the earth itself can be predicted with more confidence: it will be destructed together with the sun, our local star. Within a finite number of years (approximately five billion years), the hydrogen in the sun's central regions will become depleted. The temperature of the sun will then increase as it becomes a red giant star. In these final convulsions of heat, the oceans will evaporate, all forms of life on earth will whither away, and the earth itself will melt away.[49] The planet on which life as we know it evolved will have disappeared for ever from the universe. The sun itself will eventually be reduced to a ball of burnt-out matter.[50] From the perspective of the astro-physical sciences there is therefore a very blunt answer to the question whether there is any hope for the earth: No!

At first sight, these scientific predictions may seem to confirm the apocalyptic images of the earth's final destruction which remain alive in the popular imagination (see section 7). Is the destiny of the earth not clearly predicted in Biblical texts such as Isaiah 51:6 and Matthew 24:6-8, 29? The sun will be darkened, the moon will not give its light, the stars will fall from heaven, the heavens will vanish like smoke and the earth will wear out like a garment.[51]

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43 Haught (1990:173).

44 Peacocke (1989:39). If everything in the universe functioned within the framework of law, the whole system would become ossified; if all were chance there would be complete chaos. It is chance and law *together* that produce a universe in which new forms of existence can emerge (Peacocke 1989:39).

45 Haught (1993:109). Also Russel (1989:201-205).

46 One should perhaps, in the light of the inherent pitfalls of natural theology, be hesitant to regard this 'promise of nature' as scientific evidence for Christian hope. A critical investigation of Haught's thesis that Christian eschatology 'resonates' with this promise of nature is envisaged as part of the broader research project (see section 8).

47 Haught (1993:102).

48 Haught (1993:110). For his own constructive views on Christian eschatology, see the discussion in chapter 5 of *The promise of nature* (1993:113-142).

49 See Haught (1993:115), Peacocke (1979:325).

50 Peacocke (1979:325).

51 It must be added that these apocalyptic images are pale shadows of the far more bizarre and dramatic predictions by the astrophysical sciences of end of the earth and of the universe itself. See Peacocke (1979:329).

The adequacy of the exegesis of these texts is not of immediate concern here.[52] More importantly, and in terms of the ultimate destiny of the earth predicted by the astrophysical sciences, these apocalyptic images in the popular imagination contain only a half truth. In apocalyptic visions of the annihilation of the cosmos, a new earth will rise on the other side of this destruction. The scientific predictions carry no such assurance of subsequent renewal.[53] Furthermore, these apocalyptic images usually expect the destruction of the earth, if not in the immediate future, at least within the imaginable future.[54] By contrast, the time frame suggested by the astro-physical sciences spans billions of years. Furthermore, even the worst possible nuclear catastrophe will not be able to 'kill God's earth'.[55] It may destroy virtually all forms of life on earth (some rudimentary forms of life will probably manage to survive such a catastrophe) but the earth itself seems destined to prevail for another few billion years.

Compared to the long term fate *of* the planet earth, the future of any form of life *on* earth (or rather: *in* the earth's biosphere) is less predictable. If the history of the last billion years is anything to go by, planetary catastrophes will probably occur at regular intervals. In the great Cambrian extinctions (540 million years ago) and Permian extinctions (245 million years ago) more than half of all forms of life on earth were destroyed. A similar catastrophe took place at the end of the Cretaceous era (67 million years ago).[56] Nevertheless, some forms of life on earth seems to have the tenacity to endure even the worst catastrophes.

The future of human life is only slightly more predictable. The species *homo sapiens* will most probably disappear from the earth sooner or later.[57] *Homo habilis* made its mark on earth about 2.6 million years ago while *homo erectus* emerged only 1.5 million years ago. *Homo sapiens* first appeared little more than 400,000 years ago. The history of species suggests that the present proliferation of a (too?) highly specialised[58] human species cannot and will not endure for ever. This, surely, should sober our natural anthropocentrism. We are nothing more than an episode in the cosmic and planetary drama.[59] It is indeed possible that we will be succeeded by other, perhaps even more intelligent species on earth.[60]

How and when human life as we now know it will disappear from the earth is again much less predictable. While Christian eschatology may feel justified in seeing such an

52 See Ruether (1993:61-84) for an insightful discussion of biblical apocalyptic from an ecological perspective.

53 Ruether (1992:85).

54 Although such a form of destruction is conceivable (e.g. through a collision between the earth and a comet) this remains, in terms of scientific calculations extremely unlikely (Körtner 1995:140).

55 Contra the suggestion of the title 'Are we killing God's earth' (Vorster 1987).

56 Rasmussen (1996:25f).

57 Some physicists (e.g. Freeman Dyson and Frank Tipler, 1994) have engaged in discussions on the question whether 'human' life (in some or other adapted form) can survive indefinitely into the far future beyond planetary and even cosmic catastrophes - whether in an open universe (Dyson) or in a closed universe (Tipler). Dyson, for example reaches a remarkably optimistic scenario: 'I have found a universe growing without limit in richness and complexity, a universe of life surviving forever and making itself known to its neighbors across unimaginable gulfs of space and time' (quoted in Worthing 1996:168). Russel (1994) suggests that such scenarios are far too speculative and may be 'little more than whistling in the dark.' See also the detailed discussion of Worthing on this debate (1996:164f).

58 Van de Beek (1996:209-210).

59 Thomas Berry is perhaps one of the most eloquent advocates for seeing humanity as an episode, a dimension of the history of the universe. He states, for example, that: 'The human is less a being on earth or in the universe than a dimension of the earth and indeed of the universe itself.' (1988:195).

60 Van de Beek (1996:192) regards the possibility of a *homo excelsior*, a species more intelligent than *homo sapiens*, as a terrifying prospect. Human hope longs for the continuation of human existence on earth, if only under better conditions.

eventuality as the final day of God's judgement on the sins of humanity, it can hardly be linked to the expectation of the 'imminent' return of Christ.[61] Christians are not only reminded to refrain from any such predictions. The end of human life on earth is simply not very predictable (despite the worst nuclear and environmental scenarios the human species may survive for another few thousand or even million years).

Nonetheless, the nuclear era has brought one important difference compared to earlier expectations of the end of the world (read: the end of human life on earth). We are the first generation to know that such a catastrophe is not only an apocalyptic image; we know that and how it may possible - and it may occur at any time.[62] The danger of a major nuclear war has been considerably reduced by the end of the Cold War but this has not and cannot undo the know-how of atomic warfare and atomic energy.[63] Jürgen Moltmann therefore argues that we are living in the last age of humanity. His argument is worth quoting at length:

> The age in which we exist is the last age of humanity, for we are living at a time when the end of humanity can be brought about at any minute. The system of nuclear deterrence which has been built up and increasingly perfected has made it possible to end the life of a large part of the human race in a few hours. The nuclear winter which will follow a war with nuclear weapons will leave even the survivors no chance. This time of ours, when humanity can be brought to an end at any moment, is indeed, in a purely secular sense and without any apocalyptic images, the 'end-time'; for no one can expect that this nuclear era will be succeeded by another in which humanity's deadly threat to itself will cease to exist. The dream of 'a world without nuclear weapons' is certainly a necessary dream, but for the time being it is no more than wishful thinking. No one seriously expects that people will ever again be incapable of doing what they can do now. Anyone who has learnt the formula can never forget it again.
>
> If the nuclear age is the last age of humanity, then today the fight for humanity's survival means the fight for time. The struggle for life is the struggle against the nuclear end. We are trying to make our present end-time as end-less as possible, by giving threatened life on earth ever new time limits. This fight to stave off the end is a permanent fight for survival. It is a fight without victory, a fight without an end - at best. We can prolong this nuclear end-time, but it is an end-time in which we and all succeeding generations must live out our lives under the Damocles sword of the bomb.[64]

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These scenarios pose a challenge to an eschatological approach to an ecological theology. If the earth (and the universe) is going to be destroyed anyway, why should we

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61 See Van de Beek (1996:215). He indicates that there is a tension between the popular Christian expectation of the destruction of the world at a future apocalyptic appearance of the risen Christ (which he refers to as 'eschatological creationism'!) and scientific predictions, based on the available empirical evidence, that the earth and the cosmos will endure much longer. To resolve this tension by separating Christian faith from empirical experience is no legitimate escape route from the perspective of Christian apocalypticism itself. Or, in the words of Hans Küng (1984:252): '... biblical eschatology is not a prognosis of end-events any more than the protology is a report of events at the beginning.'

62 See Küng (1993:164).

63 See Körtner (1995:174).

64 Moltmann (1996:204-205).

guard against environmental degradation at the moment?

An immediate response to this question may, of course, be that most people are not all too bothered about gloomy scenarios on the long term future of the planet or even of the cosmos. There seems to be good enough reasons in the more immediate future to care for the environment (although these reasons usually remain purely anthropocentric). The fact that I am inevitably going to die one day does not stop me from caring for that part of the environment which is my own body. Medical doctors spend their entire careers trying to extend the (quality) of life of their patients. Although the eventual death of the patient is inevitable, this does not make the medical profession futile.[65] Where life prevails, there seems to be an imperative to nurture and protect it.

This argument is quite persuasive and perhaps expresses the disposition of the vast majority of human beings who are oblivious of all too long term cosmic or planetary projections but who continue to care for their own immediate environment. Likewise, many South Africans have maintained a spirit of hope during the years of struggle, often in desperate situations and despite humiliation and suffering. Surely, the source of inspiration behind such a spirit of hope was hardly influenced by speculations about the long term future of the cosmos.

Nevertheless, this argument does not provide an answer to the kind of ultimate questions about the meaning of life which religious traditions tend to grapple with. Religious cosmologies have always provided people with a story of the origin *and the destiny* of the universe and of the place of humanity within this cosmos.[66] They answer the questions asked by children and adults alike: Who am I? Where do I come from? What am I doing here? What will happen to me when I die? Storytellers of all cultures seem to refuse to stop short of telling the cosmic story itself, however pretentious that may seem.[67] The interest in cosmic origins and destinies may be partly speculative and explanatory but the main concern of such reflections is to understand who we are in a framework of larger significance. Cosmologies locate human life within a cosmic order across which the moral fabric of society is woven.[68] Creation stories are recalled and celebrated in liturgy and ritual because they tell us who we are and how we can live in a meaningful world.[69]

Anthropocentric motivations for an environmental praxis cannot provide answers to these ultimate questions. They cannot install a vision of hope or inspire an environmental ethos. When hope disappears, life itself soon becomes meaningless. If nihilism can even lead people to destroy a healthy body, it will certainly lead to neglect of the rest of the environment.[70] That a spirit of hopelessness is indeed affecting people's lives far more

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65 This comment is derived from Samuel Ijsseling.

66 For the general educated public in educated (Western) societies, scientific accounts of the origin and destiny of the world, and of the status of human beings in it, have replaced the traditional mythical accounts given in various forms of religion (Peters 1989:65).

67 Rasmussen (1994:176).

68 Barbour (1989:128).

69 Barbour (1989:146). Or, in the words of Thomas Berry (1988:xi): 'For peoples, generally, their story of the universe and the human role in the universe is their primary source of intelligibility and value. Only through this story of how the universe came to be in the beginning and how it came to be as it is does, a person comes to appreciate the meaning of life or to derive the psychic energy needed to deal effectively with those crisis moments that occur in the life of the individual and in the life of the society. Such a story is the basis of ritual initiation throughout the world. It communicates the most sacred of mysteries. ... Our story not only interprets the past, it also guides and inspires our shaping the future.'

70 See the comment by Körten (1995:17): 'Nihilism involves thinking the ambiguous sentence 'Nothing matters,' which with diabolic relentlessness steers toward global annihilation through nuclear war or through

directly than the long term future of the planet, will become clear in the subsequent sections.

The more ultimate question therefore remains: What kind of hope is there for the earth and for ourselves? What is the meaning of this present life?[71] Any hopes, dreams, and visions for the future is undermined by the *radical finitude*, not only of individual human life, but also of the earth itself and of the universe. The problem of depair thus becomes closely linked to the problem of finitude.[72] With reference to human, planetary and cosmic dimensions of finitude, Van de Beek asks:

> *Wat is de zin van dat alles geweest? Wat was de zin van deze kleine planeet en van deze kleine mens op een moment in oneindige ruimte en tijd? Uiteindelijk kom we dan toch weer terug bij de eenvoudige vraag: Wat is het doel van mijn leven? En wat was het doel van het leven van het kind dat stierf langs de weg van Rwanda naar Zaïre dat bleef liggen omdat zijn ouders hem niet meer dragen konden?*[73]

What then, in the face of planetary and cosmic doom, is the significance and purpose of our finite existence in space and time? These questions will simply have to be confronted anew - unless we wish to yield to the temptation of yearning for salvation *from* the earth (and not also *of* the earth), unless we wish to relinquish any continuity between my body and the resurrection of the dead, between this earth and the Christian hope for a new earth, between cosmos and eschaton.[74] But then there remains little reason not to rejoice in the final destruction of the earth. Indeed, as Ruether argues, 'The apocalypticists may even oppose efforts to ameliorate poverty, prevent war, or clean up ecological damage, for this is to oppose God's will and retard the final deliverance!'[75]

5. Environmental dimensions of despair

The cosmic depths of despair are reinforced and exemplified by the environmental crisis. Compared to the nuclear threat, ecological destruction is more hidden, imperceptible but equally deadly:[76]

> The nuclear threat is clear and stark: it involves someone pushing the button to begin the process of annihilation. Ecological deterioration is subtle and gradual: it involves the daily, seemingly innocuous, activities of every person on the planet.[77]

Since the early 1970's numerous studies have accumulated evidence of regional and global environmental disasters. The earlier emphasis was on a variety of problems, including the following:

- the world's increasing population,

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exploitation of the earth's resources.'

71 Van de Beek (1996:208) argues that the ameliorisation of the world, even the quest for justice, peace and a healthy environment, simply cannot, in the light of the finitude of the history of humanity and perhaps the cosmos, be an end in itself.

72 For the notion of a theology of finitude, see Olivier 1991:30).

73 Van de Beek (1996:210-211).

74 Possibly the only other option is to reflect on the finitude of both time and space in relation to the eternity of God's existence. See Haught (1993:113f) for a similar approach. In this way an environmental ethos is ultimately empowered by the *visio Dei*.

75 Ruether (1992:84).

76 McFague (1993:2f) identifies three important differences between these two threats to life on earth: the environmental crisis is more subtle, more nondemocratic and far more complex than the nuclear threat.

77 McFague (1993:2).

- the scarcity of resources and energy supplies (this was particularly important in the light of the oil crisis in the 1970's),
- the potential danger of nuclear war (e.g. during the years of the 'cold war'),
- the protection of endangered plant and animal species,
- the problem of soil erosion,
- the problem of (industrial) pollution in its more visual forms,
- the management of urban waste.

These environmental problems intensified during the decades which followed. Not only have the number and extent of these ecological problems increased, but also their 'quality', that is their potential danger for the future of life on earth.[78] The range of environmental hazards includes the following:

- the environmental impact of global population and its threat to the carrying capacity of the earth (a function of growth of human population, consumption and the use of technology);
- the salination and toxification of soil in the first world, overgrazing and deforestation in the third world, the collapse of fishing industries due to persistent over-fishing, the virtual destruction of the rainforests and other ecosystems, often leading to desertification;
- atmospheric pollution: the threats of ozone depletion, global warming, acid rain, changing weather patterns;[79]
- the pollution of water supplies though highly toxic forms of waste (including the problem of the disposal of nuclear waste);
- the loss of biodiversity.[80]

The hiddenness and slowness of the environmental crisis is a major obstacle in raising a public awareness of the seriousness of this crisis. The cumulative effect of environmental degradation should nonetheless not be underestimated. The survival of the human and other species at the top of the food chain is indeed at stake. The earth's ecosystems have lost their equilibrium and may be, through a process of slow poisoning, on the way to ecological death. 'We are', says Larry Rasmussen, 'violating the basic law of life itself: exchange and reciprocity, giving and receiving, living and dying and dying to live, in some relatively fair measure'.[81] The very building blocks of life: soil, water and air are being poisoned in this process. In the words of Thomas Berry and of Brian Swimme:

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78 Kroh (1991:79f).

79 See Keller (1997:84f). She argues that allusion to changing weather patterns have taken on ominous and even apocalyptic proportions. Apocalyptic thinking is being coloured green.

80 Amongst the many discussions of these environmental hazards, see Ruether (1993:85f). See Roux (1996) for a fuller discussion of these environmental hazards in the South African context.

81 Rasmussen (1991-358). Perhaps the basic problem remains the acceptance of planetary limits. The famous report on *Limits to growth* (1972) expressed the first reservations concerning the viability of sustained economic growth. Unlimited growth is simply not possible on a finite planet. A finite planet cannot sustain continuous expanding demands on resources. We are indeed living beyond our means! Also see Larry Rasmussen (1975) very helpful explanation of the economic, social and biospheric dimensions of this notion of 'limits to growth'. The notion of limits of growth is explained in a quite lucid way in the following story about Ghandi:

> After Ghandi led India to independence someone asked him whether India will now try to reach the same standard of living as England. His answer was: 'It took Britain half the resources of the planet to achieve its prosperity; how many planets will a country like India require?' (quoted in Granberg-Michaelson 1992:17).

> Our entire society is caught in a closed cycle of production and consumption that can go on until the natural resources are exhausted or until the poisons inserted into the environment are fed back into the system.[82]

> We are soaking all life forms with poisons, changing rivers into lethal sewage, and hurling million tons of noxious gases into the respiratory system of the Earth.[83]

In spite of the accumulating evidence, environmental issues is still marginalised on public agendas and in the popular consciousness. We still speak of the environmental crisis as if it is distant, as if does not affect us directly, as if it will go away sometime or other. In South Africa, the struggles for political liberation, democracy, reconstruction and development have, understandably, been more dominant on the socio-political agenda than environmental concerns. Problems such as poverty, unemployment, education, housing, health services, AIDS and crime seem to demand far more urgent attention than the hidden, often indirect and all too long-term environmental problems - even though the victims of environmental degradation and injustice are often from the poorest part of the population.

There is a growing consensus, for example in the World Council of Churches, that the problems of economic injustice, social health and environmental degradation are inextricably linked and often reinforcing one another. However this consensus has not yet filtered through to the grassroots communities. The conflict between 'feeding people' (caring for immediate needs) and 'saving nature' (protecting scarce resources) therefore remains real in the public opinion on environmental issues.

Despite this relative apathy, there remains a deep-seated recognition that environmental problems will not go away. In the popular consciousness the environmental crisis therefore lurks beneath the surface as a silent but pervasive fear for the long term future of life on this planet. This sense of despair is reinforced because of a loss of confidence in the ability of technology to ultimately remove human fear and anxiety amidst the threat of the overwhelming forces of nature. The message from this mounting data has become increasingly clear to everyone in slogans such as: 'The future isn't what it used to be.' Or: 'If current trends continue, we will not!'[84] When people consider the long-term future, let us say the future for their grandchildren, they often see a very somber picture. We fear over-population, crime, poverty, rampant diseases, chaos, economic deficits, and increasing environmental hazards. Paul Santmire's summary of these cosmic depths of despair is worth quoting at length:

> The threat of mass catastrophe is now a commonplace of the popular mind. With the passing of each day, we are becoming more and more familiar with scenarios of global thermonuclear death and devastation, planetary ecological collapse, toxic pollution of our environment, vast blights of deforestation and soil erosion, constant economic crisis for the great majority of the earth's peoples, and rampant starvation in some regions of the world, all punctuated by the threats of nuclear accidents or terrorism and stories of increasingly capricious patterns of global weather. Hovering in our consciousness, as well, is the vague but dismal image of the end of cosmic history itself, ignominously, eons from now, through some kind of universal 'heat death.' It is existentially thinkable today, perhaps as never before, that the final word being written across the pages of the

82 Berry (1988:57).

83 Swimme (1995:74).

84 Daniel Maguire, quoted in Rasmussen (1996:10).

> whole human drama, and across the pages of the cosmos itself, is *finis*, termination, death with terror, torment, and excruciating moments of pain. These are apocalyptic times indeed. And the dark clouds of a future which is no future often flood backward, as it were, into the present, producing a deep-seated and widespread spiritual anomie.[85]

There is a widespread sense of living in an end-time, drifting increasingly rapidly towards a catastrophe through human failure. While apocalyptic visions of the end of the world may also be found in Biblical literature, there is a much more recent awareness that this is indeed possible.[86] This awareness is often expressed in apocalyptic images of the end of the world[87] ('Apocalypse now'). These may take the form of religious visions of the imminent judgement and destruction of the world.[88] This is evident from the virtual explosion of apocalyptic and millenialist literature as the year 2000 is dawning upon us.[89]

More often these apocalyptic images are expressed in horror movies, cartoons, science fiction literature or heavy metal rock music. They are full of images of cosmic horrors, featuring, e.g. vengeful insects or rats or machines taking over the world, frequently in the aftermath of a nuclear catastrophe.[90] In these latter-day apocalyptic portrayals of cosmic battles, the forces of the Light often save the day, but provide only temporary reprieve[91] from the daily fears, cosmic despair and spiritual anomie that pervade much of contemporary culture.[92]

Sallie McFague argues that these apocalyptic images of the future are barely accurate. Instead she paints the following (perhaps more realistic) picture of the future (e.g. in 2100):

> It will, I suspect, generate a different, far more mundane, kind of horror: the struggle for food and water, the stench of pollution in the sky and ocean, the battle for decreasing parcels of arable land, the search for basic medical care and education. Succeeding generations will set their sights lower: they will not expect shade trees in the cities or forests in the country any more than they will expect a better future for their children. They will, among other things, learn to live with 'much beauty irrevocably lost,' but by then they may not even miss it. They will have grown used to a hotter, drier planet with many more people and many fewer trees, flowers and other animals.[93]

One may perhaps add that pockets of wealth, probably extreme wealth will continue to

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85 Santmire (1989:265-6).

86 Küng (1984:247) comments that: 'While the end of the world appeared to the authors of the Old and New Testament wholly and entirely as an act of God, surprising and unexpected like a thief in the night, for modern authors the end of the world has been seen for a long time as a possibility open to man.' (perhaps the exclusivist use of gender is *not* appropriate here).

87 See Thompson (1996) for a thorough recent discussion of apocalyptic notions of the 'end of time.'

88 Timothy Lull recently reported that the selection of texts by radio and television evangelists in the USA is dominated almost entirely by apocalyptic Biblical literature (notably Daniel, Matthew 24, and Revelation).

89 See, e.g. Thompson (1996).

90 Santmire (1989:266).

91 Küng (1984:249) comments that an illustrious phalanx of superheroes, substitute-Messiahs and fantasy-redeemers (from James Bond to Superman) is produced by our imagination to protect us from the nightmare of the inferno and to give us the feeling that we can get away again.

92 Santmire (1989:266). In a chapter on 'hope on a dying planet' John Cobb (1992:124) comments on the loss of a sense of hope amongst the youth: 'In much of our youth culture, hope is focussed on short-term goals and easily shattered when these are not realized. The quest for kicks, or mystical meaning, or celebration of life in the present moment, is in part an expression of the loss of hope, a loss we older people have bequeathed to our children.'

93 McFague (1993:8).

exist. Since this wealth will be based on ever scarcer resources, it will have to be protected by more than high walls, sophisticated alarm systems and barbed wire fences.

To quote Sallie McFague again:

> As more of the earth becomes desert, water scarcer, air more polluted, food less plentiful, the lines between the 'haves' and the 'have-nots' will become even more sharply drawn. Justice for the oppressed will recede from view when resources become scarce. If the human population doubles in forty or fifty years, as seems likely, and the pressure on the planet for the basics of existence intensifies, those with power will do what is necessary to insure their own piece of the disappearing pie.[94]

Herman Daly and John Cobb paint a similar picture:

> On a hotter planet, with lost deltas and shrunken coastlines, under a more dangerous sun, with less arable land, more people, fewer species of living things, a legacy of poisonous wastes, and much beauty irrevocably lost, there is still the possibility that our children's children will learn at last to live as a community among communities. Perhaps they will learn also to forgive this generation its blind commitment to ever greater consumption.[95]

Is there any hope that the process of environmental degradation can be turned around? Is there any hope for (human) life on earth? There are several reasons why this seems unlikely:

- What makes an awareness of environmental poisoning rather disquieting, is the fact that it may literally be too late already. The effect of the current depletion of the ozone layer, nuclear spillage and poisoning of water systems will only become visible after a number of years.
- The environmental crisis is the product of a civilization built originally on Western scientific and technological expertise and colonial natural resources and labour. This has led to an increasingly global culture of consumerism which is simply not sustainable. If everyone were to drive as many cars and pollute the air as much as the Americans and Europeans do, humanity will already have been suffocated. There has been little sign of any impact on the materialism and consumerism which pervades industrialised countries.[96] In fact, the hope and yearning of the world's poor is to achieve a similar standard of living. A concern for justice certainly demands that the poor receive their fair share of the world's resources. This cannot be done only on the basis of an ever increasing *production* of wealth; it necessitates a more equitable *distribution* of wealth.
- The environmental crisis is also a function of the current global economic order. Industrialised countries may try to preserve a clean environment in their own backyards but the root of the problem remains their unsustainable levels of consumption and pollution. The effects of these processes are often only visible elsewhere. The world market compels the Third World to abandon their own subsistence economy and plant monocultures for the world market's use, as well as to cut down the rainforests and to overgraze their grasslands.[97]

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94 McFague (1993:9).
95 Cobb & Daly (1989:400).
96 Hallman (1994:5).
97 See Moltmann (1996:207f).

Moltmann therefore argues that the ecological crisis is not a temporary crisis: 'It is a slow but sure and irreversible catastrophe, in which the weaker living things will be destroyed first, but then the stronger things too; and finally human beings as well.'[98] Although there are indeed some optimists who envision technological and social solutions to these daunting problems, the language used in films, drama, fiction and art (the antennae of society) to portray the future is predominantly one of anxiety and despair.[99] Or, in the poetic language of Karl Jaspers: 'The lights are going out, and one feels oneself plunging into an abyss.'[100]

This sense that we will probably not be able to do something about the environmental crisis can only result in resignation. Sallie McFague comments: 'The decay of our planet is probably inevitable, so we might us well accept it. What real chance do we have of turning things around?' She adds: 'All of this is probably true!'[101] McFague proceeds by referring to the people in Albert Camus' *The plague*, who did not expect to escape the plague but nevertheless decided to live a life of integrity, to live as if life mattered while they had it, despite the brutal reality that defined their world.

This is surely a form of hope and resistance. One has to make the best of a bad situation. One still have to get up in the morning and do something! One may put one's hope in hope itself, in the 'power of positive thinking.' But is this the vision of hope for the earth that can empower an environmental praxis? To tell ourselves to hope in order that there be hope is, in the long run, futile.[102] The question therefore remains: Is there any hope for the earth in the wake of environmental despair?

6. (South) African dimensions of despair

In the early 1970's Jürgen Moltmann noted that hope has become one of the lost virtues of the Western world. Its loss infects every aspect of social and cultural life:

> Everywhere people feel deceived, abused, dispirited, exploited and estranged so that they no longer trust the inbuilt goals and hopes of our progressive societies, universities, churches and sciences. They refuse to live goal-orientated and future-conscious, since they refuse to freeze that future in its present image.[103]

In 1979 Arthur Peacocke observed that the comment of Proverbs 29:18, which holds that people perish where there is no vision, applies more than ever to Western civilization. He continues:

> In the Western industrialized world, the sensitive experience *Angst* and despair, and the insensitive indulge in a frenetic search for substitute ends - in domestic mechanization and other manifestations of private affluence, in elaborate holidays, in lethal speeds, in world-escaping religions of personal salvation, in cults of UFO's and space fiction and even in the occult. ... Those in control of the world's resources of power become more and more apprehensive of the future. We suspect that 'we've never had it so good' and we'll never have it again. There seems to be a widespread loss of faith in the ability of

98 Moltmann (1996:208).
99 See already Berkhof (1967:82). For several examples from European literature, see Küng (1984:247-8).
100 Quoted in Körten (1995:2).
101 McFague (1993:207).
102 See Cobb (1992:124).
103 Quoted in Peacocke (1979:319).

the future to bring something which is actually more fulfilling into men's lives.[104]

More recently, Klaus Nürnberger commented that,

> Modern humanity is torn apart between the 'progressive' fervour of technological optimism[105] and revolutionary enthusiasm, on the one hand, and fear of rapid deterioration and catastrophe on the other. Population growth, environmental pollution, breakdown of moral values and social cohesion, the growth of violence and brutality, the emergence of new diseases, the threat of nuclear holocaust these are the spectres of our time.[106]

A sense of nihilism, doom and despair may be typical of only some sectors of the South African population. A remarkable spirit of hope still prevails in South Africa despite the daunting social and economic challenges facing the country and the sub-continent. Painting scenario's of the future in South African is the hobby of all South Africans and the task of analysts at every level of society. This paper certainly cannot do justice to the complexities required for such a sophisticated analysis.[107] Yet, the challenges facing us seem clear:

- meeting basic needs for nutrition, housing, water, electricity, health care, social welfare, etc.;
- developing human resources in terms of education, training, culture and recreation;
- building the economy in terms of trade and commerce, finance, labour policies, development of each sector of the economy and above all finding opportunities for employment;
- developing civil society through participation in decision making at all levels, encouraging tolerance and curbing crime and corruption;
- building social cohesion through family life (both in nuclear families and traditional extended families) and community structures, retrieving a sense of cultural identity;
- ensuring a clean and healthy environment.[108]

These political, economic and social challenges have to be understood within the context of global and regional forces. These forces have resulted in a widening gap between the affluent and the poor in the last two decades, a centralisation and safeguarding of economic power and the globalisation of an overtly consumerist culture.

Within the African context these forces have led to a pattern of decline, not growth. The plight of Africa is well-known. One is constantly reminded of problems like poverty, unemployment, hunger, debt, armed conflict, corruption, environmental degradation and AIDS. This constant flow of bad news has led to a numbing and self-fulfilling sense of despair, both abroad and perhaps even more in Africa itself.[109] These problems are manifestations of larger economic forces beneath the surface. Ndegwa and Green provides a helpful list of the tendencies that have led to a 'pattern of decline' on the African continent

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104 Peacocke (1979:319-320).

105 Olivier (1989:32) agrees that there is a 'deeply ingrained faith in progress and continual material prosperity and the ability of science and technology to satisfy the insatiable wants of humanity.'

106 Nürnberger (1994:148).

107 For a highly interesting, sophisticated and sober analysis of possible, probable and preferred futures in a global and South African context, see the annual research report by the Institute for Futures Research, University of Stellenbosch (Roux 1996, restricted access).

108 For a similar list, see Govender (1995:137).

109 Ndegwa & Green (1994:35).

in the last two decades:

1. a substantial decline in average per capita income and therefore living standards;
2. a rapidly deteriorating situation in the area of employment;
3. a steady decline in per capita food production on the continent;
4. a continuing loss of export market shares as well as import dependence;
5. sharp and continuing declines in foreign direct investment;
6. disintegration of basic physical, market and social infrastructure;
7. rapid urbanisation leading to the enlargement of slums and severe shortages of housing and social services;
8. a sharp and widespread decline in the rate of fall or in some cases a rise of infant mortality;
9. external debt has become an unmanageable problem for most African countries;
10. wars have caused major social and economic disruptions in several countries and these will take many years to heal;
11. environmental degradation, especially the loss of valuable soil, forests and vegetative cover has now reached alarming levels in many countries;
12. a marginalisation of Africa in international politics, especially since the end of the Cold War.[110]

The quest for reconstruction and development in South Africa cannot be isolated from this plight of Africa. In an exceptionally chilling contribution on the challenges facing the new South African nation, Shun Govender (1995) argued that we are living 'in between times' and that this has a special impact on our children. He comments:

> Our children live in a time when the past is uninspiring and the future holds no promise. If this is so we have placed an unbearable load upon the shoulders of our children; the unbearable load being that they live in a world of shattered utopias.[111]

Govender continues to concretise these shattered utopias and identifies the following aspects:

- The myth of an egalitarian, classless society of unlimited dreams has been shattered with the collapse of the Soviet empire.
- The collapse of socialism has given capitalism, with its globalisation of market forces, unfettered reign, and has unleashed the utopian myth of the consumer society upon the world as never before.
- The end of the Cold War has reunited Germany and is turning Europe into a fortress, which is again becoming a breeding ground for racism, economic greed and ethnic rivalries.
- The period of decolonisation in the Third World has brought the blessings of political liberation but the curse of economic enslavement. The poor of the Third World, especially the young people, perish in overpopulated cities, overcrowded slums and ghettos, undernourished and hopeless.

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110 Ndegwa & Green (1994:1-11). The analysis of these trends does not imply that there are neither present signs of hope nor that these trends cannot be reversed (Ndegwa & Green 1994:24). Within the context of an analysis of dimensions of depair, it does highlight the very real and daunting challenges facing the African continent.

111 Govender (1995:140).

- Young people in the wealthy West are becoming more and more conservative and uncaring of the world, while young people in the rest of the poor world are becoming rebels without a cause.[112]

This, then, is the century that our children are inheriting from us, a century of shattered utopias, and insurmountable problems. Govender comments again:

> As our century draws to its close, our world stands accused by its children: the homeless children on the city streets of Brazil; the glue-sniffing children on the street corners of Cape Town; the starving children of famine-ravaged poor countries, the wounded children of war-torn countries; the battered children of broken homes, the countless children in overpopulated cities who look expectantly for a chance in life; the affluent children of the rich who have lost their reason to live. What shall we say to them?[113]

Indeed, where can we find hope for the children, for our country and for the earth? Any answer to these questions will have to face these cosmic depths of despair. Surely, it dare not try to sell cheap forms of hope.

7. The personal dimension of despair

The context within which this research project is situated, is the need for a Christian ecological theology, spirituality and praxis within the South African context. The human resources to resist the threat of environmental degradation depend significantly on the degree of hope (or despair) present in local communities.

What, then, is the impact of the different dimensions of despair on the popular consciousness in South Africa? Is the cosmic scope of the long term future of the universe and of the earth itself of any immediate pertinence within the far more limited lifespan of mortal human beings? And how do the despairing environmental and economic scenarios really affect people's lives? Have we developed mechanisms to cope with the brutal South African realities? Is the virtue of hope still to be found somewhere?

Adequate answers to these questions require comprehensive empirical research and a much more sophisticated analysis than I can offer here. In a very provisional attempt to grapple with these questions, I have gathered some perceptions of the future from a somewhat random group of people, most of them living in the Western Cape. A few questions[114] were formulated and with the help of some assistants[115] these were distributed amongst a number of people who were willing to share with them their views and experiences. The aim of this survey was not to reach empirical conclusions, nor were the interviews conducted on a representative basis. What emerged from this survey was simply a varied collection of thoughts, perceptions and experiences on the theme of hope and despair for the future in South Africa. Perhaps the responses simply helped to articulate the range of possible dispositions towards the future.

The following responses to some of the questions which were asked may be mentioned:

Views on the future within ten years time

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112 Govender (1995:140).

113 Govender (1995:141-2).

114 For a list of these questions, see the addendum.

115 My thanks to Linda Booi, Thulani Dimaza, Pieter Jacobs, Fezeka Mgibantaka, Jeremy Ontong and Mark Vandayer for their cooperation in this project.

This question was based on the perception that many South Africans have a fairly optimistic view of the future within the next 10 years. The affluent may have lost hope in controlling political processes and safeguarding social security but remain confident of a reasonable or an even better standard of living. Many of those who were disadvantaged in the previous political dispensation sense that conditions may improve significantly for them and for their children (often due to a better education and, subsequently, to the possibility of reasonably well-paid employment in the government or formal sectors). This 'educated guess' was confirmed in numerous responses.

There has been, on the other hand, a disquieting decline in the perceived quality of life of people in South Africa. This is reflected in a recent empirical study by Möller (1995), based on the question: 'Taking all things together, how satisfied are you with your life as a whole these days?' This study indicates that happiness and life satisfaction amongst the South African population as a whole has dropped from 82% in May 1994 to only 50% in September 1995. This is especially due to a dramatic rise and decline of life satisfaction amongst the black population before and after the 1994 elections (51% indicated a degree of life satisfaction in 1983, 35% in 1988, 83% in 1994 and only 42% in 1995).

Views on the future in 50 years time (i.e. the future in which one's grandchildren will live)

While ordinary South Africans may have an optimistic view of the future on the medium term, my hunch was that views on the longer term future would express a much more sombre picture, perhaps due to the impact of environmental despair. This hunch was confirmed in several (but not all) of the responses. Virtually all the respondents felt that environmental prospects are worse than economic, social, political, medical and educational expectations.

- 'Bad news!! Just thinking of what SA will be like in the year 2000 is petrifying me enough to consider not having any children. I think SA will be a scary place to be in 2050.' (theology student, UWC)
- 'It seems as if our hopes for South Africa are becoming a nightmare'.
- 'These days to have basic necessities is a luxury - therefore those people who struggle to survive are waiting on a miracle to happen in this country.'
- 'I would prefer to have lived hundred years ago - less crime, hunger and poverty.' (woman, Bellville)
- 'If SA doesn't wake up with allowing all kinds of evil on their TV screens, SA will be in chaos in the year 2050.'

On the other hand there remains a significant degree of almost unwarranted optimism amongst a surprising number of people:

- 'South Africa will be one of the great leaders of the world and people outside will study its history to make the world a better place.'
- 'It will be a peaceful country where there is a place for everybody under the sun and there will be no discrimination.'

It is also striking that many people regard the future for themselves as fairly rosy, often despite a very gloomy outlook on the socio-political stability in South Africa in fifty years' time. Many seem to think that their survival instinct or their educational background will help them to manage relatively well even in a desperate situation. Or should this be regarded as a psychological defence mechanism to cope with an otherwise bleak future? Perhaps this also expresses a preference for the present dispensation - compared to an

uninspiring past and a future which holds no promise.

- 'I just want a good job, and I want to be happy with my life.' (schoolgirl, Stellenbosch)

What future can be expected for the earth?

Within a context shaped by the Christian tradition, one may have expected the presence of apocalyptic images of the long term future of life on earth. There is virtual consensus among the respondents that the earth will indeed be destroyed, probably sooner rather than later. This outcome is often regarded as a form of judgement on evil, sometimes as a route to escape the traumas of an earthly existence, and occasionally as a necessary transition to the establishment of God's kingdom on earth, to the coming of the 'new Jerusalem' and a new earth.

- 'I think people will go on ruining the earth (plants and animals), and only realise what they've done when they can't do anything about it any more.' (schoolgirl, Stellenbosch)
- 'The earth will be destroyed during the next century.' (unemployed man, Belhar)
- 'If it is not destroyed by humankind, then surely it will be destroyed by God.'
- 'It will be destroyed because things are changing now and it will be worse in the coming years.' (woman, Khayalitsha)
- 'With the current rate of pollution and the ozone layer being destroyed, I do not have much hope for the earth in the next 100 years.'
- 'We in our negligence and environmental ignorance will destroy the earth.' (pastor, Nyanga)

Views on the reality of death

For many Christians the dualism between body and soul in the Christian tradition and the tension between the notions of the immortality of the soul and the resurrection of the body have suppressed any vibrant sense of hope for the future on a more personal level. Hope for eternal life, heaven one day, or the resurrection of the body, is certainly still prevalent but no longer celebrated with joy.

- 'I will be buried in the ground and stay there until I become a compost.' (woman, Guguletu)
- 'I don't believe that there's life after death.'
- 'I don't know.' (student, Guguletu)
- 'I don't care for my body, but I do hope to die in Christ.'
- 'My soul will go to heaven and my flesh will just rot in the ground.'
- 'I'll probably go to hell because I am a big sinner. I'm uncertain where I will be or what I'll be doing.' (student UWC)
- 'I'll be buried and wit in the grave for the resurrection of the dead - as Jesus waited in the grave and was then resurrected.'

8. Hope for the earth amidst despair?

In the midst of this sense of despair (in its various dimensions) which were discussed in the previous sections, it seems clear that the church of Jesus Christ and the world in which we live needs 'a theological vision of the future that is larger and deeper than the

hopelessness of our souls.'[116] It is not the aim of this paper to discuss such a Christian vision of hope. This is the task of the broader research project which I have envisaged. The following aspects of such a project may be identified at this stage:

a. An analysis of inadequate (false, shallow, human-made, vain, cheap and ecologically fruitless) forms of hope, hope which excludes the earth,[117]
b. A reconstruction of the story of the cosmos as a narrative of hope,
c. Biblical narratives of hope for the earth,
d. An investigation of various models of cosmic eschatology in order to formulate a vision of Christian hope for the earth,
e. Eschatology and ethics: Hope for the earth and environmental responsibility
f. Collecting stories on a Christian environmental praxis embodying this hope for the earth.

A few comments on some implications of the present analysis for the next phase of the research project may serve as a conclusion here. The analysis of the cosmic depths of despair has, at least, exposed some inadequate approaches to Christian eschatology:

1. Any Christian vision of hope has to touch on all the human, environmental, planetary and indeed cosmic dimensions of the future. Any vision of hope that does not include hope for the earth itself, a total discontinuity between *cosmos* and *eschaton* will not be able to empower an adequate environmental praxis. Any form of apocalyptic escapism (e.g. redemption from the earth following a cosmic catastrophe) cannot provide a basis for an eschatological approach to ecological theology.
2. While any attempt to harmonise Christian eschatology with any particular scientific theory of the origins or the destiny of the cosmos remains dangerous, a separation between the disciplines of eschatology and futurology[118] will undermine any vision of

116 Santmire (1989:267).

117 I hope to test at least the following 'hunches' in this regard: 1) that hope is often portrayed in popular spiritual literature in Afrikaans as a submissive acceptance of a given state of affairs. Hope is seen as a resigned trust that God wil eventually take care of our problems. Hope implies a form of redemption from the world, the earth and earthly problems (see Swanepoel s.a.), and 2) that the literature on hope from the struggle period in South African is too narrowly defined as hope for human society, that its eschatological vision is restricted to the medium term and that human inspiration is regarded as the dynamo to achieve the utopian vision.

118 There has been a temptation in recent Christian eschatologies to separate the disciplines of eschatology and futurology from one another.

A distinction between these two disciplines is, of course, entirely appropriate. Futurology is concerned with the future on the basis of the growth, development, maturation or fruition of forces or trends already at work in the present. The scope of futurological inquiry may relate to the future of specific human societies (e.g. futurology from an economic perspective) or to the future of the universe itself (e.g. from the perspective of scientific cosmology). Christian eschatology is concerned with the same future but from a theological perspective, i.e. from the perspective of God's future presence in the world (also cf. Berkhof 1967:79f).

The urgency of a clear distinction between these two disciplines is evident from Christian attempts to regard the Biblical evidence as apocalyptic predictions for the long term future of the planet. This hermeneutical strategy still survives in the form of apocalyptic expectations amongst many Christians that we are living in 'final times' and that the earth will be destroyed soon (see section 7). On the one hand, such apocalyptic expectations do not do justice to the Biblical narratives at all. These Biblical narratives are simply not to be understood as predictions of the future. Just as Biblical protology cannot be an account of events at the beginning, so Biblical eschatology cannot be a prognosis about events at the end of the world. (Küng 1984:252). Christians therefore do not possess any special information on the basis of these narratives about the 'last things' at the end of world history. On the other hand, these apocalyptic expectations are, as predictions of the future, also somewhat naïve. Predictions can be made with much more sophistication in the discipline of futurology.

hope for the earth itself. Christian eschatology will only be plausible if it can show that the envisaged future (whether as *venturum* or *adventus*[119]) of Christian hope and the future of the world (*futurum*) refers to one and the same future. The cosmic scope of Christian eschatology therefore requires a plausible understanding of the origins, history and destiny of the universe. If God is indeed the world's future,[120] it remains important to show how this relates to the present world and especially to the earth itself.

The track record of the history of Christianity in providing a form of hope that could empower an environmental praxis has not been too promising.[121] It has all too often portrayed an alternative to cosmic pessimism that is thoroughly anthropocentric or that is so focused on the supernatural sphere ('heaven, one day') that it tends to discredit what is natural. Christian hope has often been understood as a redemption *from* the earth and not *of* the earth itself. Reinforced by apocalyptic images of the imminent destruction of the world in the Biblical roots of Christianity, this has endorsed a form of escapism from the world.[122] Catherine Keller comments on the track record of Christianity in this regard:

> Christendom is surely not accidentally the culture whose holy book happens to culminate in a vision of the imminent devastation of the earth, the culture that has developed the technology and politics capable of Armageddon, nuclear or greenhouse.[123]

Christian hope has, at best, been a form of resistance against present forms of oppression, evil, ideology, idolatry and also despair. The orientation of faith towards the future is instigated by an unacceptable present.[124] Not surprisingly, Christian hope is often found in desperate situations of poverty, suffering, oppression and also environmental degradation.[125] Christian eschatology is a protest statement, it is a form of defiance against seemingly overwhelming powers, on behalf of the dignity of humanity and in the name of the God who is committed to the well-being of creation.[126] To maintain a vision of hope amid tribulations is perhaps *the* primary Christian virtue.[127] To have hope is to become

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The necessity of a distinction between futurology and Christian eschatology should not, however, lead to a complete separation between these two disciplines. There is indeed a temptation in Christian theology to elaborate on the content of Christian hope and its vision of the future without any cognizance of the reflections on the future within the discipline of futurology. Olivier (1989:25) comments: 'Both eschatology and futurology address the same future. No reflection from a Christian perspective on the future of our world in the grip of the ecological crisis can afford not to take futurology seriously.'
This separation between eschatology and futurology can therefore only lead to an undermining of the plausibility of Christian hope.

119 See Moltmann (1996:6f), Peters (1992:). The view of the future in Christian eschatology should indeed on purely theological grounds be regarded in terms of venturum or adventus and not merely as futurum. However, Christian eschatology will lose its plausibility and its value to an ecological ethos if and when it no longer relates to the concrete future of this earth.

120 See the title of the work by Peters (1992).

121 See the comment by Keller (1997:86): 'Does not Christian eschatology gather under its wings precisely that array of doctrinal symbols that has drawn interest away from the earth, from natural conditions, from finitude and flesh?' She argues, furthermore, that this eschatological distraction from the earth complies with the ecological destruction of the earth. The tendency in Christianity has been to hope for an afterlife rather than for life itself.

122 Haught (1993:31).

123 Keller (1997:95-6).

124 Nürnberger (1994:140).

125 In this sense suffering forms an intrinsic part of hope. See Ackermann (1992:67).

126 Nürnberger (1994:149).

127 Haught (1993:114).

skilled in the habit of looking for promises at the heart of all realities and events, even when they are apparently dead ends.[128] From the perspective of Christian faith, this is exemplified by the experience of a crucified Christ from whom bloomed a seemingly impossible commitment to the future. To hope is to wait expectantly, often amid suffering, anticipating the fulfillment of God's promises.

John Cobb concludes that those who maintain a vision of hope can therefore view environmental threats unflinchingly: 'They do not deny its seriousness either in their thoughts or in their feelings. Yet their hope is the refusal of despair. Those who hope seek openings, assume responsibility, endure failure after failure, and still seek new openings for fresh efforts.'[129]

Christian hope should therefore not be confused with optimism about the future. It is not concerned with the future on the basis of the growth, development, maturation or fruition of forces or trends already at work in the present. It runs counter to both pessimistic and optimistic views of the future.[130] Moltmann expresses this concern in the following way:

> Eschatology is not a doctrine about history's happy end. In the present situation of our world, facile consolation is as fatal as melancholy hopelessness. No one can assure us that the worst will not happen. According to all the laws of experience it will. We can only trust that even the end of the world hides a new beginning if we trust the God who calls into being the things that are not, and out of death creates new life.[131]

The vision of the future which Christian eschatology portrays, is therefore simply the future with God. Christian hope is based on the belief that the key to the future of the whole cosmos is in God's hands, that the world is not an autonomous entity which has its origin, history and destiny in itself[132], that the cosmic dimensions of space and time is transcended by God's presence in eternity, that God's eternal presence permeates, embraces and governs the present world, that perhaps God is not only pushing the universe from the past but is also pulling it from the future,[133] that the whole cosmos, not just the human species, is on a pilgrimage with God from alpha to omega.[134] A specifically *Christian* eschatology will witness to the best available clue to God's presence - the life, ministry and resurrection of Jesus Christ, the crucified.[135] It will witness to the presence of God's Spirit in the world today.

If such a vision of hope is to empower an ecological theology, it must show how the history and future of the cosmos must be understood in the light of this enduring presence of God's Spirit. In this way it must show what hope there is for the future of the earth (including humanity). Christian hope can only inspire and empower an environmental praxis when its vision for the future is clear enough and plausible, i.e. imaginable as the future of the very present situation of despair.

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128 Haught (1993:118).

129 Cobb (1992:123).

130 Berkhof (1967:83).

131 Moltmann (1996:234).

132 This discerning phrase is derived from the Faith and Order Study Document, *Confessing the one faith*, produced by the World Council of Churches (1991:35).

133 Peters (1989:88).

134 Santmire (1989:269).

135 See Moltmann (1996:261). Moltmann adds that 'Cosmic eschatology also belongs within the framework of this remembered hope for Christ: the death and raising of the universe are the prelude to the expected new creation of all things and the 'new heaven and the new earth'.'

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Images of hope and despair

1. What do you think living in South Africa will be like in 10 years time compared to the present situation?

Political stability	much worse	worse	the same	better	much better
Employment	much worse	worse	the same	better	much better
Economic conditions	much worse	worse	the same	better	much better
Personal safety	much worse	worse	the same	better	much better
Education	much worse	worse	the same	better	much better
Community/social life	much worse	worse	the same	better	much better
Medical and health care	much worse	worse	the same	better	much better
Living conditions	much worse	worse	the same	better	much better
Environmental situation	much worse	worse	the same	better	much better

2. What do you think living in South Africa will be like for your grandchildren in 50 years time compared to the present situation?

3. How do you really see the future?
Which of the following words describe for you the future most accurately (e.g. rosy, hopeful, progress ahead, challenging, uncertain, difficult times ahead, dark, chaotic, any others)?

The future for ...

- for yourself
- for your children
- for the church
- for South Africa
- for the earth itself

4. If you had a choice, would you prefer to have lived a few hundred years ago, now, or a hundred years later? Why?

5. What do you believe will happen to you when you die one day?

6. What do you think will eventually happen to the earth?

7. Which of the following Biblical images of hope (if any) do you find the most attractive? Why?

- the kingdom of God
- eternal life
- the new earth
- a new Jerusalem
- the return of Jesus Christ
- the feast of the Lamb
- Armageddon
- the wolf and the lamb lying together
- heaven one day
- the immortality of the soul
- the rapture
- the resurrection of the body
- the final judgement
- no more sorrows or death
-
-

8. In what do you place your hope for the future?

We often place our hope for the future not in religious notions but, if we have to be honest, in much more secular things (and often for valid reasons). Which of the following possibilities (or others) apply to yourself or perhaps to some of your friends or to some people in your local context? Any comments?

- A living wage
- A good retirement package
- the hope for a new love affair
- Just to find employment
- The AK47 behind the door
- a salary increase
- An economic growth rate of 5%
- The AWB
- the ANC
- to win the jackpot!
- A better education for my children
- Good interest on my investments
- A good alarm system
- My own survival instinct
- police protection
- The pistol in my pocket
- The protection of my local gangleaders
- a senior promotion
- my educational background
- local self-protection units
- The RDP
- The latest scratch card competition
-

9. Somebody once said: 'Where there's life, there's hope.' But someone else disagreed: 'Where there's hope, there's life.' What do you think?

10. Any further comments?