

**Sustainability and Sabbath: Genesis 2:1-4a and the
Climate Change debate**

**Thesis submitted to Charles Sturt University
for the degree of
Bachelor of Theology (Honours)**

**George Victor Browning, Th.L. (1st Cl Hons.) D.Litt (*honoris
causa*)**

October 2010

Declaration of Originality

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma at Charles Sturt University or any other educational institution, except where due acknowledgement is made in the thesis. Any contribution made to the research by colleagues with whom I have worked at Charles Sturt University or elsewhere during my candidature is fully acknowledged.

I agree that this thesis be accessible for the purpose of study and research in accordance with the normal conditions established by the Executive Director, Library Services or nominee, for the care, loan and reproduction of theses.”

..... (Signature) (Date)

Acknowledgements

I am very grateful to those who have encouraged me along this path of exploration. To the Bishops of the Anglican Communion who appointed me chair of the Section on the Environment at the 1998 Lambeth Conference. To the representatives of the Provinces of the Anglican Communion who appointed me convener of the Anglican Communion Environment Network in 2005.

I am particularly in the debt of Dr Merilyn Clark and Professor James Haire who have given unstintingly of their time to encourage, advise and supervise me in this task; also to my good friend Alan Wilson who has proof read the document.

By no means least, I am blessed with a family: wife Margaret, sons, daughters in law and grandchildren with whom we constantly develop a narrative and dream of a world which we hope the younger ones will inherit.

Notes on use of Biblical text:

1. All quotations and references on Biblical texts are taken from the *Holy Bible: New Revised Standard Version*. 1989. London: Harper Collins.
2. Transliteration of Hebrew words follows contemporary practice and is unpointed, except where fidelity to a quotation dictates otherwise.

Contents

Abstract	1
Introduction	4
An ancient text and a contemporary context	8
Chapter 1 The Creational Context of Sabbath	12
1.1 Scholarly debate on Sabbath origins	12
1.2 Genesis 2:1-4a and its place in the Canon	15
1.3 Summary Exegesis Genesis 1:1-31	17
1.4 Exegesis and reflections on Genesis 1:26-28	20
1.5 Exegesis and reflections on Genesis 2:1-4a	25
1.5.1 God rested	25
1.5.2 God finished the work	28
1.5.3 And on the Seventh Day	31
1.5.4 So God blessed and hallowed	32
1.5.5 The Generations of heaven and earth	35
1.6 Conclusion	35
Chapter 2 The current crisis and the search for sustainability	38
2.1 Sustainability: its human history	38
2.2 Sustainability: background to a considered approach	44
2.2.1 Nature subordinated to human interest	47
2.2.2 A nature centred approach	48
2.2.3 An anthropomorphism of responsibility	49
2.3 Sustainability: Towards a Christian understanding	
(A view of the world in light of Jesus the Messiah)	52
2.4 Conclusions	55
Chapter 3 Crises of sustainability and Sabbath response	57
3.1 Summary of linkages	57
3.2 The crisis of ecological sustainability	57
3.3 The crisis of economic sustainability	59
3.4 The crisis of the human vocation	61
3.5 The crisis of inequality	63
Chapter 4 Conclusion	66
References	70

Abstract

There are ominous signs that world order that we have known and relied upon for the past century and more is changing,¹ not because humanity is intending those changes; they are happening as a result of unintended consequences of human behaviour. Empirical evidence shows ecological systems worldwide to be under very considerable strain, and in worst cases, collapse. Science confirms that the increasing release of greenhouse gases is leading the world on a dangerous path of global warming and consequent climate change. The changes are also building a growing inequity: inequity between human beings, and inequity between humans and the non-human creation. History tells us that unattended inequity is likely to produce a violent correction.

It is therefore clear that underlying principles of human engagement and cooperation must change, but how are they to change, and how can we be confident that the changes will be beneficial in the long term? Have principles that undergird the web of life on earth been ignored or misunderstood?

In seeking to respond to these questions, this thesis brings the search for sustainability into conversation with a theology of creation expressed through Sabbath. It argues that Genesis 2:1-4a (the account of Creation Sabbath) is part of the introduction to the whole of scripture and as such informs the whole biblical story and should also form the lives of successive generations of people of faith. It is further argued that the principles inherent to the account of Creation Sabbath provide a meta-story which can empower contemporary scientific fact and data with a living narrative for all humanity in the 21st century.

The primeval narrative, Genesis 1-11, presents a world view which places humanity in relation to the created order rather than above it. It highlights the twin truths that humanity is both an integral part of the created order and at the same time has a responsibility of care for sustaining that order. The thesis argues that creation is

¹ *'We will have to accommodate the fact that due to our own actions, Nature has turned against us and can no longer be relied upon to provide the conditions for the flourishing of life'*: Clive Hamilton, *Requiem for a species: why we resist the truth about climate change* (Allen & Unwin: Crows Nest, NSW, 2010), 210.

crowned by Sabbath rather than by humanity, and that human hubris moves humanity out of creation's orderly balance and places us in a position of hostility towards it. An understanding of humanity's place as part of creation, it is argued, can contribute to the necessary redressing of inequity, and enable harmony rather than hostility to emerge as the dominant characteristic of human relationship with the natural order.

The idea of 'rest' lies at the heart of Creation Sabbath. It is argued that rest is essential to creation's integrity and cannot be ignored or altered without serious consequences to the health of the created order. It is also argued that rest is a principle of mutuality of which humans have largely lost sight in a world which is dominated by competitiveness and the need for economic growth. The thesis examines the journey that secular thought has taken since the enlightenment, and that theology has taken since the reformation, both conspiring to create a world that prioritises private enterprise rather than 'common good', and the advantages of global trade rather than the challenges that it has created.

The thesis argues that the Christian church has been rendered more impotent than it should be in contributing to the major issues of our time because its focus has been redemption theology at the expense of creation theology. It is argued that it is creation theology that emphasises 'the whole is always greater than the sum of the parts' and that the health of the individual is dependent upon the health of the whole. The thesis argues that redemption theology which is not informed by creation theology inevitably places an undue emphasis upon the individual and therefore undermines the steps that need to be taken to safeguard sustainability and healthy mutuality at the heart of creation.

In its argument that caring for the created order is integral to the human vocation,² the thesis supports the argument made by Rowan Williams and others that the crisis we face is not essentially an environmental crisis but a crisis of the human vocation.³

² 'Every form of life is unique, warranting respect regardless of its worth to man, and to accord other organisms such recognition, man must be guided by a moral code of practice': *World Charter for Nature* (United Nations, 1982), <http://www.unep.org/law/PDF/UNEPEnv-LawGuide&PrincN05.pdf> (accessed 3 September 2010).

The thesis therefore argues that a person of faith and more particularly of Christian faith is a person who lives Sabbath rest,⁴ understands their place within the creation,⁵ and is committed to the redeeming of the whole created order and the fidelities which enable life to be sustainable.

³ *‘Ask what would be a healthy and sustainable relationship with the world, a relationship that would in some way manifest both joy in and respect for the Earth’*: Rowan Williams, *Sermon: Copenhagen Cathedral* (13 December 2009), <http://www.archbishopofcanterbury.org/2728> (accessed 3 September 2010).

⁴ *‘The being of his (God’s) good creation is a gift, not a sop to the divine Ego – and his Rest on the seventh day is his final bestowal of that gift’*: Capon, *Genesis the movie*, 169.

⁵ *‘Not only should man know what he is making, but if possible he should see how it is used – see how nature is changed by him. Every man’s work should be an object of contemplation for him’*: Simone Weil, *Formative writings, 1929-1941* (Amherst, University of Massachusetts Press, 1987), 155.

Introduction

While religion is experiencing resurgence at the beginning of the 21st century,⁶ it is generally a resurgence focused on conversion to its membership apart from the world, rather than resurgence through engagement with and transformation of the world: resurgence marked more by Luther's doctrine of the two kingdoms,⁷ than by Karl Barth's doctrine of the sovereignty of Christ.⁸ This has been particularly true of the debate around the issue of climate change and the contribution of the human footprint. Christianity has been focussed on matters of its own internal survival.⁹ As important as these might be they are not, with the exception of child abuse, the issues that humanity as a whole faces. Christian religion as understood by Karl Barth and expressed in his doctrine of the 'Lordship of Christ' is about order, about the ordering of the whole world under the sovereignty of God.¹⁰ How the world is ordered and the place of humanity within that ordering is a crucial question. Einstein was apparently once asked: *what is the most important question you can ask in life?* And his answer was: *is the earth a safe place or not?*¹¹ Karl Barth argues that faith is well equipped to respond to this question because of what it believes about the nature of God the creator as revealed in Jesus Christ.¹² Belief in God as creator and in human beings as created in the image of God¹³ are 'fundamentals' which can and should be robustly defended.

⁶ Harvey Cox's book, *The secular city: secularization and urbanization in theological perspective* (Macmillan, 1995), predicted that before the end of the 20th century, world governments would be secular and devoid of religious influence. The influence of Christianity in the United States of America, its resurgence in Russia and its strength in Africa together with the influence of Islam in the Middle East and parts of Asia has provided a resounding lie to this assertion.

⁷ Jürgen Moltmann, *On human dignity: political theology and ethics* (Philadelphia: Fortress Press, 2007), 61-77.

⁸ *ibid.*, 79-96.

⁹ For the Anglican Church, which I have served for 44 years as a priest and for 24 years as a bishop, the concerns have been declining Church numbers, the ordination of women, homosexuality and the terrible scandals of child sexual abuse.

¹⁰ 'His Lordship is not only 'potential'; it is 'potestas'. It becomes recognisable to us as the ordering not only of an unsearchable will but as the 'ordering of wisdom' ... Here is something objective, an order which is set high above us and apart from us, an order to which man must subject himself, which he must acknowledge, of which he can only hear, and must be obedient to it. How could it be otherwise, since the Lordship of Christ has been set up and consists in the power of his Godhead?: Karl Barth, *Dogmatics in outline* (London: SCM Press, 1966), 90.

¹¹ Matthew Fox and Rupert Sheldrake, *The physics of angels. exploring the realms where science and the spirit meet* (San Francisco: Harper San Francisco, 1996), 12.

¹² 'The existence of the man Jesus Christ is, in virtue of his divinity, the sovereign decision upon the existence of every man. It is based on the fact that by God's dispensation this One stands for all and so all are bound and obligated to this One. His community knows this. This is what it has to make known to the world': Barth, *Dogmatics in outline*, 88.

¹³ The 'Imago Dei' is examined in some detail in Chapter 1.5.

However, the place that Barth would have us claim is undermined by uninformed, or ill-informed, literalism.¹⁴ It is also undermined by fundamentalism.¹⁵ Both have severely weakened the voice of the Church in a world which, as a consequence, is more likely to turn to science to answer the question of the world's ordering and of humanity's place within it. And yet even science struggles to gain traction in the political sphere where its findings are ignored if they prove inconvenient to prevailing political and economic dogma.¹⁶

The lack of political progress that might initiate a global response to the climate change crisis with which we are confronted is the cause of some current despair amongst scientists, environmentalists and people of religious faith alike. The titles of Clive Hamilton's latest book *Requiem for a species*,¹⁷ and James Lovelock's *The vanishing face of gaia: a final warning*,¹⁸ echo Rachel Carson's 1962 book *Silent spring*,¹⁹ and speak for themselves. But despair is not a platform upon which humans can build a future, let alone work to transform the present. Despair tends to paralyse while hope generally triggers energy. John Chrysostom²⁰ is accredited with having said: '*It is not sin that plunges us into disaster, as rather despair*'.²¹

It is therefore crucial that a contribution to the climate change debate which might energise proactive commitment carry with it a basis for hope: '*Christianity is eschatology, is hope, forward looking and forward moving and therefore*

¹⁴ '*Literalism: the disposition to take words and statements in their literal sense*'. (New Collins Dictionary). Literalism is particularly serious when applied to the first 11 Chapters of the Bible. Narrative which gives an interpretive understanding of the whole of life, or the whole of history, is greatly reduced in its power and authority when treated as a literal account of one moment in history.

¹⁵ Fundamentalism and literalism are related but are not the same. Fundamentalism is the development and universalising of doctrine on the basis of a literal reading of scripture or some other sacred text.

¹⁶ Guy Pearce, *High and dry: John Howard, climate change and the selling of Australia's future* (Camberwell, Vic.: Penguin, 2007), 97ff.

¹⁷ '*Sooner or later we must respond and that means allowing ourselves to enter a phase of desolation and hopelessness, in short, to grieve*': Clive Hamilton, *Requiem for a species: why we resist the truth about climate change*, 211.

¹⁸ James Lovelock, *The vanishing face of gaia: a final warning* (London: Allan Lane, 2009).

¹⁹ Rachel Carson, *Silent spring* (Boston: Houghton Mifflin, 2002).

²⁰ Archbishop of Constantinople c347 -407.

²¹ '*That which leads people to sin, seems not only to be a sin itself but a source of sins. Now such is despair*': Thomas Aquinas Summa Theologica 2.20, quoted in Jürgen Moltmann, *A theology of hope* (London: SCM Press, 1967), 8.

revolutionising and transforming the present'.²² Critics of Christianity would stereotype its basis for hope on the grounds that it is all about the future and not about the present. Moltmann deals very persuasively with this criticism when he argues that hope in a future identity energises transformational behaviour in the present, because the future is not disconnected from the present, it is its fulfilment.²³

One of the main contributions Christianity can make is to offer hope that galvanises transformational action. The argument must be made both within the Church and in the wider world. It must be made inside the Church because of two prevailing beliefs. One is that God is in control therefore any pro-activity to change behaviour is presumptuous. The second is that because the physical world is deemed to be doomed, action to try to safeguard its life is futile. The argument in the world has to be made because economic growth theory generally prevails over ecological priorities, thus rendering sustainable action a low priority, even an undesirable outcome.²⁴

This thesis argues that Sabbath is a celebration of creation, that creation functions out of *an inner integrity of order that is relational*, and that sustainability does not threaten but safeguards the economic life of humans as well as the ecological life of the nonhuman creation. It will be argued that the health and wellbeing of every individual is completely dependent upon the health and wellbeing of the resources from which they are fed. In the case of humanity, our resources constitute the totality of the created order.

It is the broad consensus of science that changes currently being made by the burning of fossil fuels are having, and increasingly will have, an impact upon all life on the planet because of the increased density of greenhouse gases, the absorption of heat and resultant global warming.²⁵ It is argued therefore that the burning of these fuels,

²² Jürgen Moltmann, *A theology of hope* (London: SCM Press, 1967), 16.

²³ *ibid.*, 32.

²⁴ Pearse, *High and dry: John Howard, climate change and the selling of Australia's future*, 271ff.

²⁵ The Dutch Government issued a press release on the 5 July 2010 confirming the core conclusions of the International Panel on Climate change (IPCC), conclusions that had come under very considerable criticism and which had emanated from the fourth assessment report of a potential 3000 scientists worldwide. On 23 June 2010 IPCC announced 831 scientists (from a 3000 pool of interrelated disciplines) will co author the fifth assessment report.

and the continued development of industrial enterprises based on them, is both ecologically unsustainable and counter to the commission humans have inherited through the Creation Sabbath to care for creation. It is estimated that today humanity uses the equivalent of 1.4 planets to provide the resources we use and to absorb our waste. This means it now takes planet Earth one year and five months to regenerate what we use in a year.²⁶

At issue is a contrast between a culture which describes itself as ‘24/7’, and a way of living that accepts limits. The ‘first’ Sabbath (Gen 2:1-4a) follows the **creator God’s** six days of work. It is a cessation from further production and celebrates the presence of the creator within creation. Similarly, the ‘Christian’ Sabbath follows the kenotic activity of the **redemptive God** in the dying of Jesus who restores and makes new the relationships inherently present but not actualised in the first Sabbath.²⁷ The tension between the desire to work and the need for rest that enables a celebration of the relationships at the heart of life is tellingly portrayed in the conversation between Jesus and the sisters Mary and Martha:

But Martha was distracted by her many tasks, so she came to him and asked, “Lord do you not care that my sister has left me to do all the work by myself? Tell her to help me”. But the Lord answered her, Martha, Martha, you are worried and distracted by many things; there is need of one thing only. Mary has chosen the better part, which will not be taken away from her. (Luke 10:38-42).

If ‘resting’ or accepting limits reveals truth about God, must this truth also be reflected in creation if it is to flourish? Can this Christian understanding enhance growing scientific calls for limits to human activity which threatens environmental stability? These questions are explored in Chapters 2 and 3.

Christianity’s failure to make a meaningful contribution to the debate about sustainability and climate change from a deep theology of creation is in part related to the fact that the Christian Sunday does not adequately capture the spirit that is

²⁶ *World footprint: do we fit on the planet?*, http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/ (accessed 4 October 2010).

²⁷ ‘Jesus’ proclamation of the Kingdom of God puts the messianic Sabbath into effect ... Jesus’ proclamation of the imminent kingdom makes the whole of life a Sabbath feast: Jürgen Moltmann, *God in creation: an ecological doctrine of creation* (London: SCM Press, 1985), 291-292.

intended in the Jewish Sabbath. Jürgen Moltmann argues: *'The best creation wisdom is to be found in the Jewish theology and practice of Sabbath. In abandoning the Sabbath, the Gentile Christian Churches have lost this means of access, and we generally overlook it altogether'*.²⁸

Moltmann's critique has not been responded to by the Church which continues to be more comfortable with a theology of redemption than a theology of creation²⁹ and as a consequence struggles to make a relevant contribution to debates like the climate change debate. Contributions must spring from a deep understanding of creation and therefore a conviction about 'for which' and 'to which' we are to be redeemed. Christian understanding of Sabbath remains largely restricted to a detailing of the expectations inherent in one day in seven, rather than being celebrated as a window through which creation itself is to be understood. There is a double task: firstly to convince the Church that it has missed core truth and secondly to initiate dialogue between the Christian doctrine of creation and the scientific and economic case for ecological sustainability.

Creation Sabbath is here chosen as the entry point into a Christian doctrine of creation because it embraces creation; it is its crown and its theological springboard.³⁰

An ancient text and a contemporary context

Canonical scripture has at least two hermeneutical contexts: the one in which it was written and the one in which it is being read and applied. The Hebrew writers recalled the events of the past, not for the purpose of history, but as narrative that transformed, empowered and gave identity to the present.³¹ This is most obviously true of the account of the escape from Egypt as celebrated in the Passover, but it is

²⁸ *ibid.*, xiii.

²⁹ *'Christian reflection on creation has been a bit of a Cinderella in twentieth century theology'*: Rowan Williams, *On Christian theology* (Oxford: Blackwell, 2000), 63.

³⁰ *'Human beings are the last to be created. In so far they are the apex of created things. But they are not the 'crown of creation'. It is the Sabbath with which God crowns the creation which he beholds as very good'*: Moltmann, *God in creation*, 187.

³¹ *'Canon functions, for the most part, to provide indications of the identity as well as the life style of the ongoing community that reads it'*: James A Sanders, *From sacred story to sacred text* (Philadelphia: Fortress Press, 1987), 17.

true of all texts; unless they have the power to illuminate and transform the present, their authority is diminished. James Sanders argues it well:

*The bible read as a paradigm of the verbs of God's activity permit us to conjugate in our own contexts the verbs of God's continuing activity and how we may pursue in our time the integrity of truth. That is God's oneness both ontologically and ethically.*³²

The post-exilic context in which the priestly 'P'³³ material is edited and reaches its final form is one of crisis. A world order in which God was conceived to be sovereign was severely undermined with the destruction of the temple. In contrast, the contemporary context, articulated by many contemporary writers, but for the first time challengingly by Rachel Carson,³⁴ is very different. Carson describes a world in which humanity, not God, claims sovereignty over nature. Can a text, born in one context, speak to people of faith in a vastly different context? How can its voice be heard in the general community?

In recent years there has been robust argument from several popular writers strongly denying any contemporary context for these ancient texts. Richard Dawkins asserts that scripture, and the Genesis texts in particular, are myths formed in the mind of unenlightened people, and insists they can have absolutely no place in contemporary public discourse.³⁵ His vigorous debating style gains weight from the statistical reality that a short view of history or 'creationism' is supposedly believed by 45% of the adult population of the United States of America, while 5% of Australians believe the world is thousands rather than millions of years old.³⁶ Richard Dawkins is right to point out that such beliefs are entirely inconsistent with the overwhelming weight of modern science and both cannot be right.

³² *ibid.*, 73.

³³ Joseph Blenkinsopp, *Introduction to the Pentateuch*, in *New interpreters Bible, vol. 1* (New York: Abingdon Press, 1994), 312ff.

³⁴ 'As man proceeds toward his announced goal of the conquest of nature, he has written a depressing record of destruction, not only against the earth he inhabits but against the life that share it with him'. Carson, *Silent spring*, 85.

³⁵ 'There are two ways in which scripture might be a source of morals or rules for living ... Both scriptural routes ... encourage a system which any civilised modern person would find obnoxious ... To be fair much of the Bible is not systematically evil but just plain weird as you would expect of a chaotically cobbled together anthology of disjointed documents'. Richard Dawkins, *The God delusion* (London: Bantam Press, 2006), 237-238.

³⁶ *Most Americans tentative about origin-of-life explanations*, <http://www.gallup.com/poll/18748/Most-Americans-Tentative-About-OriginofLife-Explanations.aspx> (accessed 4 October 2010). The poll figures show a constant graph line from 1982 -2008.

While to the community of faith the Genesis texts cannot be ignored, opponents of faith attack any legitimate contribution to public debate on issues such as climate change by reference to the supposed literalism of the text. These supposedly literal interpretations do enormous damage. They undermine confidence that faith and science can not only live side by side, but can also inform one another. Used as an axiom of belief, they shield the believer from genuine dialogue and discourse with the contemporary world. It is essential that they be read in a way that does justice to the text as we have received it, while illuminating and transforming the context of the reader. As scientists such as Galileo and Darwin were to experience, the institutional Church's insistence that primeval text should be understood literally made a conflict between their faith and their remarkable scientific theories and discoveries inevitable.

Walter Brueggemann has shown us new ways to hermeneut these texts, a never-ending task in each generation. In a short essay in *Christian Century*³⁷ he argues that the first creation story, climaxed in Genesis 2:1-4, not only may be interpreted as an insight into how people of every time and of every generation are to experience the abundance of the created order, but also that it may be understood as an outline of the relationality that is the source of such abundance. Such relationality exists not only between God and the creation, but also within creation between each constituent part.³⁸ Abundance with limitation seems a contradiction. However if the limitation referred to is akin to the limitations that flow from relational fidelity, limitation is in fact the 'order' that protects abundance.

In contrast, humanity often seeks abundance through domination which becomes the misuse of unequal power. Modern humanity, as argued by the Nobel laureate Paul Crutzen, has reached a point of almost complete domination of the nonhuman creation.³⁹ Domination which issues in one-sided advantage, where unequal power is

³⁷ Walter Brueggemann, "The liturgy of abundance, the myth of scarcity," *Christian Century*, 24-31 March 1999, <http://www.religion-online.org/showarticle.asp?title=533> (accessed 3 September 2010).

³⁸ 'It is only as existing within the ordered whole of the universe that creation may present, each in its particular way, God's goodness': Thomas Aquinas quoted in Rudi A te Velde, *Aquinas on God: The 'Divine Science' of the Summa Theologiae* (Burlington: Ashgate Press 2006), 127.

³⁹ 'The Nobel laureate chemist Paul Crutzen dubbed the modern era the Anthropocene, a human-dominated Earth, because the scale of our human activities is now so large that it has thrown every

misused, is inimical to mutually life giving relationships. Within mutually life giving relationships, fidelity (faithfulness) accepts the boundaries, the limits, which protect the continued health and wellbeing that relationship offers. Limits are not to be avoided because of diminished opportunity for personal fulfilment, but to be embraced because of the gain that mutuality offers. The prosperous of today's world appear to live in limitless abundance. The poor of today's world appear to live as captives to crippling scarcity. Both realities cannot simultaneously reflect the intended outcome of creation's destiny.

The Enlightenment's influence on the contemporary world is explored in Chapter 2. Reason's influence upon human affairs is rightly valued, but should it be assumed that 'progress' is always enlightened? The thesis asks whether such an assumption is well founded; and whether abandonment of Christian insight into human frailty has contributed to false assumptions that 'progress' is inevitably a virtue.⁴⁰ It will be argued that the creation narrative crowned by Sabbath reflects a more sober and therefore a more genuinely hopeful view of humanity's place in the created order.

fundamental, life-sustaining system on earth off kilter: Jeffrey Sachs, *Common wealth: economics for a crowded planet* (London: Allen Lane, 2008), 67-68.

⁴⁰ *It is as if wheat and tares grow in all our lives – in each of us individually and down through history – perhaps to the end of time*: Stephen Green, *Good value: reflections on money, morality and an uncertain world* (London: Allen Lane 2009), 191.

Chapter 1 Creational context of Sabbath

1.1 Scholarly debate on Sabbath origins

Only 15 books in the Hebrew Bible mention the Sabbath at all. Given the significance of Sabbath to Jewish religious practice and indeed its place in the Decalogue, it is somewhat surprising that reference to its origins is not more explicit and its practice not more central during the period of history covered by the Hebrew Bible.

Indeed there is an absence of a clear reference to a popular pre-exilic celebration of Sabbath, yet its association with the Royal house in the seventh century is supported by the references in 2 Kings to the roster of guards and portals of the king's house that are apparently associated with the Sabbath:

The covered portal for use on the Sabbath that had been built inside the palace and the outer entrance for the king he (Ahaz) removed from the house of the Lord. He did this because of the King of Assyria. (2 Kings 16:18).

This is what you are to do: one third of you, those of you who go off duty on the sabbath and guard the king's house (another third being at the gate Sur and a third at the gate behind the guards) shall guard the palace; and your two divisions that come on duty in force on the sabbath. (2 Kings 11:5-7).

The debate about the origin of the Sabbath has a long scholarly history; many scholars postulate a link with new moon festivals.

Of those books that mention the Sabbath the following have texts that link Sabbath and New Moon and or appointed feasts: Leviticus (*see cultic calendar below*), Numbers (*see cultic calendar below*), 2 Kings (4:23), 1 Chronicles (23:31), 2 Chronicles (8:13, 31:3), Nehemiah (10:33), Isaiah (1:13, 58:13, 66:23), Lamentations (2:6), Ezekiel (46:1), Amos (8:5), and Hosea (2:11). There are three major cultic calendars in the Hebrew Bible, Leviticus 23:2-43, Numbers 28:1-29:39 and Ezekiel 45:13-46:15. In both the Ezekiel and Numbers lists the sacrifices prescribed for the New Moon are more demanding than those prescribed for the

Sabbath.⁴¹ The Leviticus calendar has no prescribed sacrifices for the Sabbath. Sabbath is completely missing from the listing of feast days in Ezra chapter 3.

Victor Hamilton,⁴² with many other scholars, makes the philological link between the Hebrew word for ‘rest’ and the Mesopotamian word for ‘full moon’: ‘*We are of the opinion that the Hebrew noun šabbāt, the completion of the week is to be identified philologically with AKK. šapattu, the day of the full moon, the fifteenth day of the lunar month*’. Gnana Robinson⁴³ argues that any pre-exile biblical reference to Sabbath is a reference to royal full moon day celebrations on the 15th day of the month and it was not until after the fall of the Davidic kingdom that Sabbath became widely associated with seventh day rest and a celebration of Yahweh’s universal sovereignty. Rainer Albertz pushes the development of Sabbath as a weekly family celebration into the period of the Babylonian Exile.⁴⁴ He argues that prior to the exile, Sabbath was the cultic new moon festival celebrated by the priests, while amongst the people there was probably a rest day associated with an agricultural taboo. He suggests the two probably came together after the exile. Mark Hamilton⁴⁵ asserts that the Sabbath Festival developed out of the celebration of the full moon and cites the absence of any reference to Sabbath in Deutero Isaiah as an indication that if Sabbath developed in the exile it took a while to be universally practised.

⁴¹ Numbers requires the sacrifice of four lambs on the sabbath day and two bulls, one ram, seven lambs and one goat on the new moon festival; while Ezekiel requires six lambs and a ram on the sabbath day, and on the new moon one bull, six lambs and a ram.

⁴² Victor Hamilton, *The book of Genesis, chapters 1-17* (Grand Rapids: William B Eerdmans, 1990), 142.

⁴³ Gnana Robinson, *The origin and development of the Old Testament Sabbath* (Frankfurt am Main: Peter Lang, 1988).

⁴⁴ ‘*The origin and history of the Sabbath has still not been fully explained. However there is much to suggest that in the pre-exilic period the Sabbath was the Israelite New Moon festival (11 Kings 4:23; Isa 1:13; Hos 2:13 Amos 8:5. As such it was celebrated regularly in the cult by the priests in the temple (Isa 1:13; Hos 2:13) in a way – comparable to the tamid sacrifice – which probably excluded the public. The Sabbath was significant for the public only to the degree that it was a good time for the getting of omens. Thus in pre-exilic times the Sabbath was largely part of the official cult and came to an end with the destruction of the Jerusalem temple ... Alongside this in the pre-exilic period there had been a family custom of interrupting agricultural work every seven days for a day of rest. It probably had something to do with an old taboo about not exploiting animals until their last breath. There is something to be said for the thesis that the two institutions became combined in the exile. The festival which was once limited to the official temple cult was opened up so that families everywhere could participate in it, the rest from work therefore took on cultic and religious dignity*’: Rainer Albertz, *A history of the Israelite religion in the Old Testament period, vol 2: From the exile to the Maccabees* (Louisville: Westminster/John Knox Press, 1994), 408ff.

⁴⁵ Mark W. Hamilton in *New interpreter’s dictionary of the Bible, vol.5*, (Nashville, Tenn.: Abingdon Press, 2006-2009), 1-13.

A counter position is presented by E. Haag: ‘*šabbā* derives from the verb *šā a* in the specialised meaning “celebrate”, in the OT the noun *šabbā* refers consistently to the weekly day of rest that is independent of the lunar phases and has no reference to the day of the full moon’.⁴⁶ This counter position is also supported by Paul Barker,⁴⁷ although Barker’s argument seems to be generated by an assumption that because Sabbath is decreed by the Decalogue it must have been practiced in the pre-exilic period. He cites Hosea 2:11: ‘*I will put an end to all her mirth, her festivals, her new moons and her Sabbaths*’, as evidence of a pre-exilic weekly festival. Few scholars, however, would agree the text supports such a position.

Heather McKay⁴⁸ argues that Sabbath was a household observance that became a day of communal worship no earlier than 200 BCE. Margaret Barker⁴⁹ argues that Sabbath evolved into a day of worship for Jewish people in the Roman period. She argues that during the period of the Hebrew scriptures there is no reference to Sabbath as a communal day of worship. She cites the Qumran texts as the first clear indication that Sabbath had taken on a communal observance in the singing of psalms and the teaching of the Torah. Richard Lowery⁵⁰ points to various views on both the origins of Sabbath and its cultic importance over many centuries to warn against an assumption that Sabbath has a single meaning in the Hebrew Scriptures.

It appears therefore from the textual references and the scholarship based on them that Sabbath may well have had its origins in the rhythms and cycles of the moon, originally pagan celebrations that honoured the mystical cycles of life upon which fertility and abundance were deemed to depend. Judaism replaced the honouring of nature with the honouring of the God who is its creator. Judaism’s monotheism demanded expression of belief that God is sovereign, not simply in relation to all nations, but over the created order. Post the exile with the loss of sovereign territory and the loss of the Jerusalem Temple, the symbolic seat of God’s universal reign, it

⁴⁶ *Theological dictionary of the Old Testament* (Grand Rapids: William B Eerdmans, 2004), vol XIV, 389.

⁴⁷ ‘*There is no evidence that connects these moon festivals with Sabbath origins in the text*’: Paul A Barker in *Dictionary of the Old Testament: Pentateuch* (Illinois: InterVarsity Press, 2003), 699.

⁴⁸ Heather McKay, *Sabbath and synagogue: the question of Sabbath worship in ancient Judaism* (Leiden: Brill, 1994).

⁴⁹ Margaret Barker, *Creation: a biblical vision for the environment* (London: T&T Clark International, 2010).

⁵⁰ Richard H Lowery, *Sabbath and jubilee* (St. Louis: Chalice Press, 2000), 4.

became even more necessary to undergird theological belief in such a universal claim of God's sovereignty, which 'P', the priestly writer achieves in the text of Genesis 1:1-2:4a.

1.2 Genesis 2: 1-4a and its place in the Canon

Thus the heavens and the earth were finished and all their multitude. And on the seventh day God finished the work that he had done, and rested on the seventh day from all the work that he had done. So God blessed the seventh day and hallowed it, because on it God rested from all the work he had done in creation. These are the generations of heaven and earth when they were created. (Genesis 2:1-4a).

Important to the argument of this thesis is the authority with which Gen 2:1-4a is imbued by its placement within the canon of scripture. It is not simply a text that is found somewhere in the Bible, but is part of the biblical introduction to the whole of scripture.⁵¹ Middleton argues:

I propose that as we enter the ongoing canonical dialogue between biblical texts that seem to be in tension and grapple with much that is ethically problematic in the passages of scripture (including cosmogonic conflict), we take seriously the placement of Genesis 1 as the prologue or preface to the biblical canon.⁵²

While the text and its authorship P (priestly)⁵³ is almost certainly post-exilic, it is given maximum authority by its placement 'in the beginning', a preface to everything else.⁵⁴ The text is part of the primeval narratives (Genesis 1-11) that deal with questions that relate to the whole human family. From the creation stories through to the account of the flood, successive generations are formed by narrative that seeks to make sense both of the world that Israel inhabited and that which

⁵¹ 'Simple and majestic, dignified yet unaffected, profound and yet perfectly clear, [Genesis] chapter 1 makes a superb introduction not only to the book of Genesis itself, but to the whole of scripture': Gordon J Wenham, *World Biblical commentary: Genesis 1-15* (Waco, Texas: Word Books, 1987): 36.

⁵² Richard Middleton, *The liberating image: the imago Dei in Genesis 1* (Grand Rapids: Brazos Press, 2005), 268.

⁵³ 'Though historically the latter of two creation stories at the beginning of Genesis (ca late 500's BCE) the seven day creation narrative introduces the book and serves as an introduction to the Bible as a whole': Lowery, *Sabbath and jubilee*, 82.

⁵⁴ Literary criticism has a long history, especially through German scholarship. The Graf Welhausen documentary hypothesis (JEPD) was extremely influential through much of the 20th century, work that was built on by Martin Noth and Gerhard Von Rad. While modern scholarship has moved somewhat away from a reliance on literary criticism, nevertheless acceptance of the contribution of the priestly redactor around the time of the Babylonian exile remains.

humans of all times and generations experience.⁵⁵ Fretheim expresses it this way: *Genesis 1-11 is not (so much) for Israel as it is for us, universal history; as such it is also their own history.*⁵⁶ While all scripture has authority, as part of the whole creation narrative, Genesis 2:1-4a carries an additional interpretative authority as the preface to the Bible, and as a source of understanding for human living in every successive generation.

As a preface to the Bible the narratives celebrate God the creator of all, the source of wisdom who speaks creation into being. Margaret Barker⁵⁷ argues that, given mosaic authorship in the post-exilic period, the narrative's authority is further enhanced.⁵⁸ She further argues that Genesis Chapter 1, a vision 'imagined by Moses', is the inspiration for the design for the Temple in all its detail; therefore all temple based worship, she argues, is worship that assumes an essential ordering of creation. Just as God is enthroned in the midst of creation so Yahweh is enthroned in the Holy of Holies in the Temple. If her argument is correct then creation theology is as significant to Hebrew historical narrative as it is to the wisdom literature with which it is more familiarly associated. The loss of the Temple and its imaging of the sovereignty of God over creation became the context for P (priestly writers) to give literary form to this theology.

As a source of human understanding, the narrative offers a meta-story. Global humanity now lives with the challenges, opportunities and crises of life at the beginning of the 21st century, but because of cultural, religious and ethnic diversity, is denied a common story that could enable a unified response. This narrative has the capacity to speak to all peoples. Its reference is the human species (*adam*): '*So God created humankind in his image, in the image of God he created them; male and female he created them*' (Gen 1:27). The narrative places humanity in relation to the earth, the *adamah*. Human activity post the 'Enlightenment' tends to place humanity apart from, or above, the created order. If the ecological challenge forces a reviewed

⁵⁵ '... presenting as they do the steady, ongoing rhythm of events which stamp the course of human existence – birth, length of life, begetting, death; all that is essential. The real significance of what is happening lies in the continuity of successive generations': Claus Westerman, *Genesis 1-11: a commentary* (London: SPCK, 1984), 7.

⁵⁶ Terence E Fretheim, *Genesis in New interpreter's Bible* (New York: Abingdon Press, 1994), 336.

⁵⁷ Barker, *Creation a biblical vision for the environment*, 35-72.

⁵⁸ *ibid.*, 36.

understanding of humanity's place within the created order then this text has a particular contribution to make.

Richard Lowery states: *'In the first story Sabbath is portrayed as a fundamental principle of the universe, the climax of the world's creation at the beginning of time'*.⁵⁹ Genesis 2:1-4a climaxes the first account of creation, and as such underscores the principles that are inherent to it. While creation is the preface to the Bible and the prologue of history, Sabbath is the window through which creation is to be understood.

If Genesis 2:1-4a is in fact creation's crown rather than simply the final 'day' in a sequence of seven, then its understanding and practice becomes more than a 'seventh day festival'. Rather, it is an insight into the way life is to be understood and lived every day. Sabbath's special insight and gift is 'rest'. How 'rest' is to be understood in its application to all of creation, including time, how it is informed by the concept of 'finished' and how it embraces the 'blessing' and 'hallowing' of creation are principles to be explored. This exploration addresses humanity as an integral part of creation as well as humanity in its vocation as a carer of creation.⁶⁰

1.3 Summary exegesis of Genesis 1:1-31

Because the Sabbath text climaxes the first creation narrative, a general exegesis of Genesis chapter 1 and especially verses 26-28 needs to precede exegesis of Genesis 2:1-4a.

'And God said': each creation 'day' (Gen 1:3,6,9,14,20,24,26) commences with a proclamation of God's word which becomes God's action. This is called performative speech. *Elohim* (God) alone can *bara* (create). To *bara* is to do something that has never been done before.⁶¹ In that sense it is beyond human understanding or explanation: *'for my thoughts are not your thoughts, nor are my ways your ways says the Lord. For as the heavens are higher than the earth, so are*

⁵⁹ Lowery, *Sabbath and jubilee*, 79.

⁶⁰ *'In every fragment of it (nature) a thousand million lesser fragments cohere and interact'*: WH Vanstone, *Love's endeavour, love's expense: the response of being to the love of God* (London: Darton, Longman and Todd, 1977), 84.

⁶¹ Westerman, *Genesis 1-11*, 98.

my ways higher than your ways and my thoughts than your thought' (Isa 55:8-9). The creation narrative is not an explanation of the origins of creation, but an assertion of the sovereignty of God over and with creation:⁶² *'God's sovereign purpose is what the world is becoming'*.⁶³ While 'P' uses *bara* to relate to God's activity in primeval creation, Deutero Isaiah uses the word to describe God's soteriological action in history, thus elevating redemption with creation to activities that are possible only to God. As God once created, so God continues to make new. *'I make you hear new things, hidden things that you have not known. They are created now, not long ago'* (Isa 48:6,7).

Deutero-Isaiah's extensive use of *bara*⁶⁴ further illumines its presentation of God (in this case *Yahweh*) as sovereign. In spite of Israel's defeat and exile and despite the notion that a nation's gods are defeated with the nation, Israel's God is sovereign of all. As his prophecies of judgement have come to pass, so will his promises of salvation and restoration be fulfilled.⁶⁵

Creation's first three 'days' recount the emergence of 'spaces' to be inhabited, achieved through the separation of opposites:

- Day 1. Light and darkness resulting in day and night; (Gen 1:1-5)
- Day 2. Water that is above from water that is below, by means of a dome resulting in seas and the heavens; (Gen 1: 6-8) and
- Day 3. Water and dry land resulting in dry land and sea and the plants appear.⁶⁶ (Gen 1: 9-13)

Separation and relatedness make a foundational antinomy at the heart of creation. Without separation there can be no diversity, without relatedness there can be no community or mutuality. Through separation God gives shape and pattern (order) to that which had none.

⁶² The scientific theory of evolution is neither supported nor denied by the creation narrative.

⁶³ Williams, *On Christian theology*, 69.

⁶⁴ Isa 41:18ff; 43:1,7,15, 45:12, 48:7, 54:16.

⁶⁵ Willem A VanGemeren, ed., *New international dictionary of Old Testament theology and exegesis*, vol. 1 (Grand Rapids: Zondervan Publishing House, 1997), 733.

⁶⁶ Included in the third day are the plants. Presumably the rationale being that they are part of the spatial landscape essential to the living beings that are to fill it.

These three ‘spaces’ of creation are then filled on the fourth, fifth and sixth days:

- Day 4. The heavens are filled with sun, moon and stars to control day and night and the seasons; (Gen 1: 14-19)
- Day 5. The seas and the sky are filled with fish and birds; (Gen 1:20-23) and
- Day 6. The dry land is filled with animals and by humans, the *adam*.(Gen 1: 24-31)

The language of the narrative carries a rhythm. Each day is marked by the speech of God: *and God said* followed by its outcome: ‘*In the Hebrew ‘word’ is an act of power, it makes things happen*’.⁶⁷ Each day (except for the seventh day) is marked by the refrain *and there was evening and there was morning of day x*. Each day (apart from the second day⁶⁸) is valued, *and God saw that it was good*. At the conclusion of the sixth day God exalts everything that has been made as ***very good*** (Gen 1:31). The whole is greater than the sum of its parts. God imbues the totality of creation with the order and rhythm that he intends. Polkinghorne argues this case in what he calls ‘*top down causality*’ or having the character of ‘*holistic action*’.⁶⁹

God is concerned to fill each of the three spaces. ‘*For thus says the Lord who created the heavens (he is God!), who formed the earth and made it (he established it); he did not create it a chaos, he formed it to be inhabited*’ (Isa 45:18). Abundance is a mark of the creation; abundance in volume (*be fruitful and multiply*) and abundance in diversity. Each of the three spaces is filled with the diversity of God’s creation. The *adam* along with the animals and plants is formed from the *adamah* (earth). Although placed on dry land, commissioned with dominion, *adam* impacts on the other spaces.

⁶⁷ Capon, *Genesis the movie*, 166.

⁶⁸ The absence of the reference on the second day is generally understood to be an accidental omission of scribes rather than a specific commentary.

⁶⁹ John Polkinghorne, ed., *The work of love: creation as kenosis* (London: William B Eerdmans, 2001), 98ff.

The Noah narrative, which climaxes in the creation covenant (Gen 9:8-17), reflects the impact that humanity has on the whole of creation when boundaries are breached and liberties taken. The covenantal conclusion is that God will protect life and its diversity. The significance of abundant life is wrongly restricted to numerical abundance. It refers equally to abundant diversity; a diversity Noah is expected to honour as he builds the ark and a diversity God honours as his blessing falls upon all those species and their descendents who leave the ark.

In summary, the creation narrative is not about the importance of humanity and the manner in which creation is at humanity's disposal. The narrative is about the significance of creation in its totality and the principles that apply to it; principles which apply to humanity. It is about sovereign purpose, how it is to be achieved and by whom it is exercised. The place that humanity might have in this sovereign purpose is the matter to which we now turn.

1.4 Exegesis Genesis 1:26-28

Then God said, Let us make humankind in our image, according to our likeness; and let them have dominion over the fish of the sea, and over the birds of the air, and over the cattle, and over all the wild animals of the earth, and over every creeping thing that creeps upon the earth. So God created humankind in his image, in the image of God he created them; male and female he created them. God blessed them and God said to them, be fruitful and multiply and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth (Gen 1:26-28).

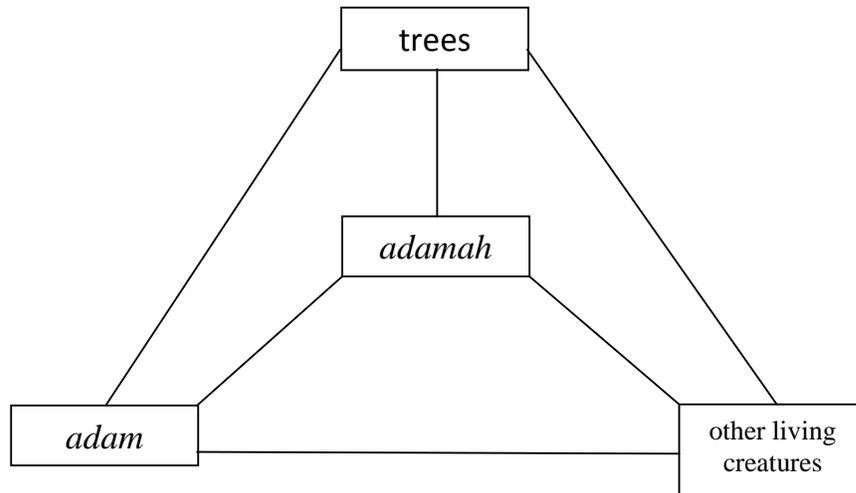
In contrast to the previous commands and their outcomes, this text is constructed differently. Rather than a series of spoken commands, in this case the picture is of God, seemingly in community, *let us make* - the language is cohortative, and personally involved in the creation of humanity. This is an important difference which has implications for what follows. We need to be very cautious of an interpretation of the text which appears to give humanity rule or dominion that is independent from a continuing relationship with God, and indeed with all that God has made.

The passage makes humanity's primary relationships clear. We, *adam*, are made by God from the *adamah*. We are relational beings; we belong in relationship to God

and in relationship with the earth and all that belongs to the earth. '*Far from creation revolving around humans, it is the adamah that is central to all living things*'.⁷⁰ The mutuality and sustainability of creation is dependent upon a healthy *adamah*. Marilyn Clark illustrates the point in the following diagram:⁷¹

⁷⁰ Marilyn Clark, *Caring for and protecting the earth in Into the world you love: encountering God in everyday life*. (Adelaide: ATF Press, 2007), 7.

⁷¹ *ibid.*, 8.



Humanity errs significantly when life is lived as if it is independent of creation and not affected by its fluctuating fortunes and pressures. By standing apart from creation and exploiting more than we rightly give an account to God, we are by implication reducing our own hopes and aspirations into the future: *'We are not put into the world as subjects of a king or victims of a series of laws. We are not put into the world at all. We are it. ... The earth is not external to God, it is filled with the glory of God'*.⁷²

Having encountered the reality that humans are part of creation, related to it and to all living things, the text then tackles the vexed issue of the nature of that relationship. On face value *rada* (dominion) and *kabas* (subdue) seem to indicate, and indeed have been taken to mean that creation exists primarily for humanity and its needs. The text seems to give permission, indeed commission, for aggressive human activity in relation to nonhuman creation. However, all biblical texts are informed by other texts. The importance of this truth is never more important than in its application to these few verses, for the weight of scripture speaks of creation as a revelation and gift of God, to be treated with honour and respect (Psalm 19; Job 38-39).

Subdue, (*kabas*), is a very difficult word to treat benignly. *The New International Dictionary of Old Testament Theology and Exegesis*⁷³ states that the verb always

⁷² Anne Primavesi, *From Apocalypse to Genesis: ecology, feminism and Christianity* (London: Burns & Oates, 1991), 206.

⁷³ VanGemeren, ed., *New international dictionary of Old Testament theology and exegesis*, vol.2, 596.

presumes a stronger party and a weaker party and most often indicates a misuse of power. Westermann notes: *the verb כָּבַשׁ means to tread the wine press in Joel 4.13; it means to subdue in Numbers 24.19 and Leviticus 26.17 and is used of the dominion of the king in 1 Kings 5.4; Psalm 110.2; 72.8, Isaiah 14.6; Ezekiel 34.4, Psalm 8.6.*⁷⁴

However, when put beside other texts the sublimation of all things under the feet of humans cannot be God's intention for *adam*. It is this very self-focused activity which becomes the reason for God's judgement on humanity in the Noah narrative (Gen 6:5-8) and the cause of castigation from the prophets (Hosea 4:1-4; Amos 2:6, Micah 6:6-15). Notwithstanding other texts, the difficulty with *kabas* remains. Perhaps the presence of *kabas* in this foundational text is recognition of the yawning chasm between an ideal and the reality of human history, a chasm that the second creation story attempts to explain.

Dominion, (*rada*), is an exercise of rule that can be either serving or self-serving:

*'Human dominion is a power bestowed by God and must serve to maintain God's order. Human rule must have positive consequences for the ruled; in ruling, humans must preserve their humanity and remain humane. Therefore human dominion can be understood only as an action for which humans are accountable to God.'*⁷⁵

The argument made by Fishbane⁷⁶ is similar: humanity is being commissioned with the divine task of caring for the creation. This argument is picked up by Chardin,⁷⁷ who argues that the evolution of humanity is essential to the evolution of creation and that it is the role of humans in every generation to respond to the needs of the created order. Richard Middleton makes the same point.⁷⁸ He argues the royal motif

⁷⁴ Westerman, *Genesis 1-11: a commentary*, 158.

⁷⁵ *Theological Dictionary of the Old Testament*, vol. xiii (Grand Rapids: William B Eerdmans, 1995), 335.

⁷⁶ Michael Fishbane, *Biblical text and texture: a literary reading of selected texts* (Oxford: Oneworld, 1998).

⁷⁷ Pierre Teilhard De Chardin, *The phenomenon of man* (London: Fontana, 1965).

⁷⁸ *'Thus when the creator ceases work on the seventh day, it is not the abdication of a petty deity from a burdensome task, as in some Mesopotamian creation accounts. Rather God's rest in Genesis 2 represents the delegation to humanity of the royal task of administering the world on his behalf. Humans are delegated with nothing less than God's own proper work, as the creator's authorised representatives on earth. Whatever other meanings God's rest has elsewhere in the Old testament (for example justification for the Sabbath as in Exodus 20:11), in the context of Genesis 1 creation story it appropriately symbolises the beginning of the rule of the human race, their coming into their true power as makers of history, as representatives and emissaries of God, called to shape the world in*

and its further clarification in shepherd imagery is a consistent scriptural response to the needs of humanity for order. It should therefore not surprise us that similar imagery is transferred to creation and its needs for similar protection. Despite diverse scholarly exegetical comments, the weight of opinion seems therefore to confirm that we are reading a passage that gives primacy to human responsibility under God, for the care of the created order.

Voluminous debate concerns what image (*selem*), and likeness (*demut*), might mean. Attempts to distinguish between spiritual and corporeal attributes are less than satisfying, for the Bible itself makes no such distinction. Westermann argues that scholars are asking the wrong question when they seek from this verse illumination about the nature of humanity.⁷⁹ He argues that the verse is illustrative of the activity of God rather than illuminating the nature of humans. He strengthens his case by pointing out that outside the primeval narrative and with the exception of Psalm 8 the nature of humanity is not otherwise specifically addressed in the Hebrew scriptures; while the relationship between God and humanity is constantly underscored. In other words the text illustrates the activity of God who in the creation of humanity creates a counterpart who can be addressed as ‘you’ and who must respond as ‘I’. The person as *God’s counterpart* is an insight attributed to Karl Barth: ‘*The image and likeness of God describes the special nature of human existence by virtue of which a person can take a stand before God ... a human being is one whom God can address as ‘You’, and an ‘I’ who is responsible before God*’.⁸⁰

Understanding the text in this light is immediately confirmed in the second creation story when Adam is called to account: ‘*The Lord God called to the man and said to him, “Where are you?”*’ (Gen 3:9ff) and soon after in the narrative of Cain and Abel where Cain is similarly addressed: ‘*Then the Lord said to Cain “Where is your brother Abel?”*’ (Gen 4:9ff). The text (Gen 1:26-28) should not therefore be primarily understood as a description of human nature per se, but rather an insight into the nature of the relationship of humanity with God. Healthy and mutually life giving

imitation of the creator’s own primordial activity in the first six days of creation: Middleton, *The liberating image: the imago Dei in Genesis 1*, 294.

⁷⁹ Westermann, *Genesis 1-11*, 155ff.

⁸⁰ Barth, *Dogmatics*, 182ff.

human relationships imply accountability and fidelity, no less must undergird whatever understanding we might attribute to *dominion* and *subdue*, the divine commission to humanity. What human accountability might look like in the secular community is debated by economists like Jeffrey Sachs, and environmental scientists such as Tim Jackson and Tim Flannery and is discussed in Chapter 2.

1.5 Genesis 2:1-4a

The central message of Genesis 2:1-4a, the rest of God, appears to be enhanced through a chiasmic like structure:

- a. Thus the heavens and the earth were finished
- b. and on the seventh day God finished the work he had done
- c. and he rested on the seventh day from all the work he had done
- c. so God blessed the seventh day and hallowed it
- b. because God rested from all the work he had done
- a. These are the generation of heaven and earth when they were created.

In verse 2a ‘*finishing*’ is linked to ‘*resting*’. In 2b ‘*resting*’ is related to a *seven* day cycle, and in verse 3 ‘*blessing*’ and ‘*hallowing*’ is said to be the outcome of ‘*resting*’. By providing this poetic rhythm to the passage by virtue of its replicating echo, P is making clear what he considers to be the heart of the blessing and hallowing that God is giving to creation; it is the ‘rest’ of God.

1.5.1 *He rested on the seventh day 2:2b: on it God rested from all the work he had done 2:3b*

The basic meaning of rest (שָׁבַט), is “to cease”, “come to an end”. It is never ‘rest’ from work;⁸¹ rather it infers that what was intended has been secured. Its use is not ‘end’ in the chronological sense, but in the sense of completion or fulfilment. In this sense the *Theological Dictionary of the Old Testament*⁸² suggests the word, when associated with *sabbat* (Sabbath), has a specialised meaning of “celebrate”. Westerman argues: ‘*It is a gift to humankind, a gift that regulates human existence*

⁸¹ *Theological Dictionary of the Old Testament*, vol. xiv (Grand Rapids: William B Eerdmans, 2004), 385.

⁸² *ibid.*, 385.

inasmuch as the command to rule the remainder of one's work is limited by what is implied in the sanctification and blessing of the seventh day'.⁸³

While the noun *sabbat*, Sabbath, does not occur in the text and it cannot therefore be argued that this is an 'inauguration of the Sabbath',⁸⁴ nevertheless Fishbane acknowledges: '*Its importance may well stem from an historical need to legitimate the Sabbath day and a seven day week by locating them at the primordial time in the creation of the world*'.⁸⁵

Fishbane goes on to argue that the 'rest' of God marks a progression from the activity of God to the activity of humanity in relation to creation.⁸⁶ While responsibility for care might be delegated, the sovereignty of God remains central to Jewish religious belief and is expressed through the making, first of the tabernacle, and then the temple. In the account of the making of the tabernacle there is a rare reference to *ruach elohim*, echoing Gen 1:2, which is said to fall upon Bezalel who is commissioned to fashion the ark, the tabernacle and the mercy seat (Ex 31:1ff). Such reference seems to lend credence to Barker's⁸⁷ thesis that the Tabernacle and Temple are images of the sovereign God over creation and that worship in both places is worship of the creator.

The text may indeed mark the transition of care from God, who remains sovereign, to humanity which must act as surrogate. 'Rest' is also a foundational element in the understanding of how that care is to be exercised. The Exodus Decalogue (Ex 20:8-10) argues that the Sabbath is grounded in the 'rest' of God and that this rest is to be extended to all living things over which humanity has oversight:

Remember the Sabbath day and keep it holy. Six days you shall labour and do all your work. But the seventh is a Sabbath to the Lord your God: you shall not do any work – you, your son or your daughter, your male or female slaves, your livestock or the alien resident in your towns (Ex 20:8-10).

⁸³ Westerman, *Genesis 1-11: a commentary*, 169.

⁸⁴ 'The Sabbath as a cultic institution is quite outside the purview' (of Genesis 2.1-4a): Gerhard von Rad, *Genesis: a commentary* (London: SCM Press, 1972), 62.

⁸⁵ Fishbane, *Biblical text and texture: a literary reading of selected texts*, 11.

⁸⁶ *Ibid*, 12.

⁸⁷ Barker, *Creation a biblical vision for the environment*.

Rest is therefore not simply cessation of work, but a commentary upon the reason for work, which is to serve the needs of the community to which the individual belongs. For humans that community is inclusive of the nonhuman creation. Work is to benefit the individual through its contribution to the health of the whole. Rest restores the balance put at risk by self focussed exploitation, or simply by failure of human or natural origin. The need for rest is a characteristic of creation in the same way that it is characteristic of God.⁸⁸ *'In returning and rest you will be saved, in quietness and trust shall be your strength'* (Isa 30:15).

In a collection of essays, John Polkinghorne⁸⁹ and his fellow essayists argue that God's rest is best understood as the *kenosis* of God, a fundamental and necessary characteristic of God's love.⁹⁰ They argue that self emptying or self-limitation is the fundamental characteristic of the God revealed in scripture and especially in the incarnate word of God, Jesus. Humanity, made in the image of God, is to manifest this same characteristic in the care of creation and in so doing to discover the harmony that is its fulfilment.⁹¹ To ignore this characteristic, they argue, is to face the inevitability of conflict.

This theme is taken up somewhat enigmatically by the writer to the Hebrews (Heb 4:1-11). He places Psalm 95:11 *'They shall not enter my rest'* in juxtaposition with Genesis 2:2 *'For in one place it speaks about the seventh day as follows: and God rested on the seventh day from all his works'*.⁹² The writer to the Hebrews is arguing to his Jewish Christian audience that the 'rest' that God intends is not negated by the disobedience of the wilderness because 'rest' is a promise inherent in creation itself. Behind his argument lies the inference that effort or work aimed at individual security or rest is illusory: *'In this transient world there is no ultimate security, no final achievement, no objective fulfilment'*.⁹³ Brueggemann argues: *'The Sabbath in*

⁸⁸ Genesis 9:8ff; Exodus 23:10-12; Exodus 31:12-17; Leviticus 25; Deuteronomy 5:12-15.

⁸⁹ Polkinghorne, ed., *The work of love: creation as kenosis*.

⁹⁰ *'God never appears mightier than in the act of his self-limitation, and never greater than in the act of self-humiliation'*: Moltmann, *God in creation*, 148.

⁹¹ Malcom Jeeves, *The nature of persons and the emergence of kenotic behaviour* in Polkinghorne, *The work of love: creation as kenosis*, 66-89.

⁹² He appears to have confused the rationale for the fourth commandment in Exodus which roots the commandment in creation, with the rationale in Deuteronomy which roots it in the exodus

⁹³ Hugh Montefiore, *Epistle to the Hebrews* (London: A&C Black, 1964), 86.

Gen 2.1-4a (is) a liturgical cessation of all productivity so that the creatures in imitation of God may be at peaceable rest'.⁹⁴

The Hebrews passage helpfully reaffirms that Sabbath rest is both a life principle and a destiny to which we travel. Inasmuch as our '*end is in our beginning*',⁹⁵ commitment to this principle now becomes even more urgent.

While this 'rest of God' is not an early scientific explanation of the origin of things, it is however a narrative which draws us into the conflicting realities of human experience and

... indicates the limitations of our understanding of creation. God created human beings in such a way that it was not necessary for them to stand in mortal opposition to one another so as to sustain themselves with food. Our experience of God's world, and this was also of P's, is that mortal opposition is utterly unavoidable.⁹⁶

The Creation Sabbath, or rest, speaks into this seemingly unresolvable dilemma. Its formulation speaks to principles that may be applied in today's pattern of ordinary living, while also pointing to an as yet unrealised hope.⁹⁷

1.5.2 *Thus the heavens and the earth were finished and all their multitude 2:1a. And on the seventh day God finished the work he had done (2:2a)*

'Finished', *kala*, appears 200 times in the Old Testament.⁹⁸ Here its meaning is directly related to *sabat*. While it is often used in the negative, in this case its meaning appears positive: '*The verdict is that good wins out: the first act of God is complete in the harmonious working together of all that God has created. When the word of God is complete, then it is fulfilled*'.⁹⁹ In this sense, while creation is finished, it can also be understood as open to its future. It is an act that is complete and yet in its continuity it is without limit.¹⁰⁰ There is paradox here. Each generation

⁹⁴ Walter Brueggemann, *The word that redescribes the world: the Bible and discipleship* (Minneapolis: Fortress Press, 2006), 116.

⁹⁵ TS Eliot, *Four quartets: no2: East Coker*, line 1.

⁹⁶ Westerman, *Genesis 1-11: a commentary*, 174.

⁹⁷ '*Sabbath rest is at the centre of YHWH's alternative intention for creation, the defining mark of creation in Gen 2.1-4a*': Brueggemann, *The word that redescribes the world*, 128.

⁹⁸ VanGemeren, *New international dictionary of Old Testament theology and exegesis vol. 2*, 641.

⁹⁹ *ibid.*, 641.

¹⁰⁰ Rad, *Genesis: a commentary*, 60.

appreciates creation afresh, yet its essential integrity remains the same. Whatever God intended creation to be, it has now become. The first key point we can say about the Creation Sabbath is therefore that it is a celebration of integrity or completeness.

Genesis 2:1: *'thus the heavens and the earth were finished'* looks back to Genesis 1:1: *'In the beginning when God created the heavens and the earth'*. In the six days of creative activity the various spatial and temporal aspects of the creator's activity are named and in the case of the sun, moon and humans the reason for their creation and their relationship to the rest of creation have been specified. On this seventh day, which unlike the other six has no reference to morning or evening,¹⁰¹ the completeness of the creator's work is announced. Heidel translates: *'and on the seventh day God declared his work finished'*.¹⁰² The absence of a reference to morning and evening is almost certainly not simply a scribal error, but an indication that this is not to be understood as a 'day' in whatever way the other six are to be understood. This is not a day that follows the others, but through the announcement of God's rest, it celebrates and embraces them. Westermann makes this point when he argues: *'The meaning is clear, everything that exists in heaven and in earth is here, even what is not expressly mentioned in Genesis 1 is included here'*.¹⁰³ The multitude or diversity of God's creation is integral to our understanding of its abundance. The embracing of all creation in this way prepares us for the blessing and hallowing which is to follow, for the blessing and hallowing is to be inclusive of all that this day embraces.

The repetition of Gen 2:1, *'God finished the work that he had done'*, appears to have become a literary form. It is used in other contexts to encourage the reader to understand that an activity is complete in that it replicates God's activity in creation. The completion of the tabernacle is a primary example: *'Moses finished the work'* (Ex 40:33). As already noted, Barker argues that the commission to build the Tabernacle, and later the Temple, was in fact a commission to replicate, in tangible

¹⁰¹ *'The seventh day has no morning or evening because just as Creation began in the eternal rest of God, so it ends in the same repose'*: Capon, *Genesis the movie*, (Eerdmans 2003), 161.

¹⁰² Alexander Heidel, *The Babylonian Genesis: the story of the creation* (Chicago: University of Chicago Press, 1951), 127.

¹⁰³ Westerman, *Genesis 1-11: a commentary*, 169.

form, the sovereignty of God over creation; for the tabernacle was the place over which the *shekinah* (glory, or settling) of God dwelt.

From the cross Jesus is recorded as saying: '*It is finished*' (John 19:30). These words of Jesus are only recounted by John, the Gospel writer who most specifically draws the incarnation into the creative activity of God: '*He was in the beginning with God all things came into being through him*' (John 1:3). Paul, in his second letter to the Corinthian Church, 2 Cor. 5:17, speaks of a 'new creation' inaugurated on the cross. New Testament writers proclaim that since the '*creation of the world*', Rom 1:20, 8:19, 8:22, Heb 9:26, 4:3, Rev 11:8, 17:8, there remained another dimension of creation to be experienced, or perhaps to be reclaimed. It is described as a wholeness of relationship, an elimination of division.

For neither circumcision, nor uncircumcision is anything, but a new creation is everything. (Gal 6:15).

In the new creation there is no longer Greek or Jew, circumcised and uncircumcised, barbarian, Scythian, slave and free: but Christ is all in all. (Col 3:11).

The blessing of creation, its rest, is to be found in the mutually fulfilling inclusiveness of its relationships.

Does "*God finished his work*" infer that God can be anthropomorphically likened to an inventor who, having set his creation in motion, no longer has involvement with it? Cussato contends: '*Since God was on the seventh day in the position of one who had already finished his work; consequently he refrained from work on the seventh day*'.¹⁰⁴ The emphasis is therefore not so much cessation, understood as absence, but rest,¹⁰⁵ a positive state of being in and with the creation.

In the midst of the dispute between Jesus and the Jews in relation to the Sabbath we find these words: '*My Father is still working and I also am working*' (John 5:17). On the face of it the words seem to contradict '*God finished the work that he had done*'

¹⁰⁴ Umberto Cassuto, *From Adam to Noah* (Jerusalem: Magnes Press The Hebrew University, 1961).

¹⁰⁵ 'In "*De Genesi ad Litteram*", Augustine spends quite a bit of time insisting that God's '*Requies*' on the seventh day should not be taken as mere cessation from labour': Capon, *Genesis the movie*, 169.

(Gen 2:2).¹⁰⁶ The dispute occurred over the curing of the crippled man at the pool of Bethzatha on the Sabbath Day. Jesus was condemned for assisting the man, for this was considered to be forbidden work. Canon WH Vanstone argues that the primary ‘work’ of God is the refreshment of rest: rest being not an absence of work, let alone of presence, but an opportunity for renewal.¹⁰⁷

1.5.3 And on the seventh day God finished the work (2:2a) God blessed the seventh day and hallowed it (2:3a)

Verse 2a appears to be a repetition of verse 1 and like it references back to the beginning of creation in Chapter 1:3-5, for just as creation commenced on day one, it has completion on day seven. The only significant difference between the two verses is reference to the seventh day. As to how seven emerged in this way there can be no certainty.

Three is the smallest plural number and so represents minimum unity with plurality.¹⁰⁸ It is the number that represents the Divine. Four, understood through the four cardinal points of the compass, expresses wholeness or completion.¹⁰⁹ Seven as a number representing perfection is perhaps therefore derived from the addition of three and four, whereas the number 12, the representative number, is perhaps derived from three times four.

It is assumed that observation of the lunar phases led to the hebdomadal division of the month,¹¹⁰ and yet lunar months do not have whole numbers of days. An early reference to seven-day periods in cuneiform (23rd century BC) is a reference within the context of religious festivals and not the lunar calendar.¹¹¹ Seven plays a very significant role in both the Old and New Testaments as the following examples testify. The festivals of Passover and Tabernacles are seven-day festivals. The New Year, the Day of Atonement and Tabernacles all occur in the seventh month. Jubilee

¹⁰⁶ The relationship between ‘*finished*’ in Genesis 2:2, Jesus’ words from the cross ‘*it is finished*’, and Jesus words ‘*My father is working up till now*’ is dealt with by St Augustine in: Capon, *Genesis the movie*, 170-172.

¹⁰⁷ W H Vanstone, *The stature of waiting* (London: Darton, Longman & Todd, 1982).

¹⁰⁸ VanGemeren, *New international dictionary of Old Testament theology and exegesis*, vol. 4, 144.

¹⁰⁹ *ibid.*, 495.

¹¹⁰ *Interpreters Dictionary of the Bible*, vol.4, (Abingdon Press 1962), 294.

¹¹¹ *ibid.*, 294.

is celebrated in the year following seven times seven years. Sacrifices and ornaments for the cult are often counted in sevens. Revelations such as Joseph's interpretation of Pharaoh's dream (Gen 41:1ff) unfold in a pattern of seven full and seven lean years. Heaven, in the Book of Revelation, is referenced through the constant use of the number seven.

While the references are almost limitless, nevertheless as an introduction to the whole of scripture this reference has very particular purpose.¹¹² Through this text 'P' establishes the hebdomadal cycle at the heart of creation and relates its observation to the experience of blessing and hallowing. 'P' would have us understand that Creation Sabbath is not simply the observing of one day in seven but a means of entry into the blessing that God intends for all life through creation. Thus Creation Sabbath celebrates creation's rhythm, rhythm that *'cannot be abrogated or legislated by human beings'*.¹¹³

1.5.4 So God blessed the seventh day and hallowed it (2:3)

The creation narrative has already recorded two blessings:

- The fifth day: *'God blessed them saying "Be fruitful and multiply and fill the waters in the seas and let birds multiply on earth"'* (Gen 1:22).
- The sixth day: *'God blessed them and God said to them be fruitful and multiply'* (Gen 1:28).

While the other two blessings were for specific species within creation, the blessing of the seventh day is a blessing upon creation in its entirety: *'Special attention is given to the seventh day, it is holy and blessed precisely as the conclusion to the work of the previous six days and can only be understood in relation to them'*.¹¹⁴

The Hebrew root *b-r-k* (bless) occurs 88 times in Genesis. *'Nothing was more important than securing the blessing of God in one's life and nation'*.¹¹⁵ The word is

¹¹² *'Seven is a period of time so the seventh day completes the first period of time'*: Cassuto, *From Adam to Noah*, 64.

¹¹³ Fretheim, *Genesis*, 346.

¹¹⁴ *ibid.*, 170.

¹¹⁵ *New international dictionary of Old Testament theology and exegesis, vol. 1*, 758.

used frequently in the patriarchal narratives and especially in relation to God's covenantal people. However here it is used in relation to the whole of creation:

*The first thing that God did after creating was to pronounce his blessing over the work of his hands. It is not an empty pronouncement or an expression of wish or goodwill, nor is it a bare command. Rather the blessing of God has content, it actualises and enables.*¹¹⁶

Blessing gifts creation with life. P makes the source of the blessing clear by the manner in which he precedes and follows the declaration of God's blessing and hallowing with a statement about God's rest. Creation is blessed and hallowed because it is embraced in the 'rest' of God. It is this 'rest' that is central to the possibility of creation's continuity. It is not further activity or effort which will secure the desired outcome of fertility and continuity, but 'rest'. Lest 'rest' be understood as a state of passivity or neutrality, it is countered by the idea of blessing. In its rest, the seventh day gives the Creation Sabbath '*power to stimulate, animate, enrich and give fullness to life*'.¹¹⁷

For the *adam* to live within the blessing of God is a matter of choice.¹¹⁸ '*Behold I set before you this day life and death blessing and cursing – choose life*' (Deut 30:11ff). Blessing declared is not the same as blessing received. We have already noted P's apparent understanding that creation is endowed by its creator with primeval harmony, and yet the experience of history is as much hostility as harmony. In that all living things are blessed, they are blessed with the right, indeed the responsibility, for the continuity of their species. However, one of the significant differences between the human and nonhuman creation is choice. Humans have the choice to live within the intended blessing of God or to live outside it. At the beginning of the 21st century we now have at our disposal sufficient scientific knowledge, albeit disputed by some, to know what human actions are going to enable blessing to continue both for the created order and for future generations, and what actions are going to threaten life's continuity and sustainability. That we are ignoring that information and continue to live recklessly, refusing to observe the rest that creation

¹¹⁶ *ibid.*, 758.

¹¹⁷ Westermann, *Genesis 1-11*, 172.

¹¹⁸ '*No organism has the power to consider self limitation on behalf of others as one of its options. That level of choice only appears with humans*': Holmes Rolston, *Kenosis and nature* in Polkinghorne, *The work of love: creation as kenosis*, 62.

demands is unconscionable. What Sabbath rest might look like is the major focus of Chapters 2 and 3.

The blessing of the seventh day is also a blessing of time.¹¹⁹ This point is given weight through the Deuteronomic Decalogue (Deut 5:15) in which the fourth commandment is not referenced through creation but through the exodus, a moment of blessing and redemption within the course of history.

The seventh day is also hallowed or sanctified. Hallowing, or making holy, ‘*qadosh*’, is the outcome of being associated with God. Many events, places, utensils, celebrations and people are described as holy because of their relationship with God. However, the Old Testament canon gives to the priestly author in this passage the status of being the one ‘*who uses the word holy for the first time in the Bible*’.¹²⁰ This usage of the word in the primeval story proclaims that being associated with God is not restricted to the paraphernalia of religious ceremony, but pertains to all that God has made. This challenges us to rethink conventional understanding that holiness is essentially about being set apart, rather than being set in the midst:

*‘Holy – not a tacky haloed stain glass window but a million volt charge of electricity. The world God creates and sanctifies is a place of terrible goodness and terrible holiness. In all its beauty and all its roughness, in all its lives and deaths, and in all its matter – down to the most miniscule, it is a place no more tame than god is’.*¹²¹

Holiness, *qadosh*, emanates from God. In a sequence of concentric circles Jacob Milgrom¹²² places Sabbath in the circle closest to God, thereby suggesting that the whole created order including humanity is made holy through Sabbath celebration. In specific reference to Israel, Milgrom notes that in exile, Israel was subject to the monthly Babylonian calendar and that the proclamation of Sabbath served to focus the sanctification of time, the context of all temporal activity.¹²³

¹¹⁹ Nahum N Sarna, *Genesis* (Philadelphia: Jewish Publication Society, 1989), 15.

¹²⁰ Donna Orsuto, *Holiness* (London: Continuum, 2006), 12.

¹²¹ Capon, *Genesis the movie*, 166.

¹²² Jacob Milgrom, in *New Interpreter’s dictionary of the Bible*, vol. 2, 854.

¹²³ *ibid.*, 854.

While the regimentation of life around a weekly cycle has now become universally observed, its inherent logic in the sanctification of time has not. The sanctifying of the day has meaning only in its capacity to lift the whole of time from the realm of ordinariness to that which is endowed with the sacredness of God.¹²⁴ Jesus was to teach: ‘*Sabbath was made for man not man for the Sabbath*’ (Mark 2:27).

1.5.5 *These are the generations of the heavens and the earth when they were created (2.4a)*

Genesis Chapter 2 verse four seems a little strange in that 4a is clearly intended as a summary of the first creation account and 4b begins the narrative of the second creation. It is generally assumed that 4b is the work of a redactor whose intention is a statement which finalises the first account, and as such adds nothing new; however in their summary the words emphasise and assume continuity of generations.

The summary half verse also returns us to an understanding of life with roots in the whole cosmos. Thomas Aquinas in *Summa Theologiae* assumes the single parts of the cosmos are there for the whole cosmos and the cosmos is there for God.¹²⁵ Further, creatures endowed with reason have a special teleological relationship with God to whom they can reach out by their action, by their knowledge and their love.¹²⁶

1.6 Conclusion

Key points to emerge from exegesis of the text concerning Creation Sabbath are set out below:

- Creation Sabbath is a celebration of creation’s integrity; both in its completed unity, but equally in its diversity, the celebration of beauty and purpose in all

¹²⁴ ‘We must take as our starting point that when P arranged the works of creation in a seven day pattern he was not concerned merely with a succession of seven days, but with a whole, a unit of time, which becomes a whole in the climax of the seventh day’: Westerman, *Genesis 1-11*, 171.

¹²⁵ ‘In so far as the multitude and distinction of creatures are intended by God, their diversity may be considered to contribute to the perfection of the Universe as a whole’: Thomas Aquinas, quoted in Velde, *Aquinas on God: the Divine Science of Summa Theologiae*, 127.

¹²⁶ ‘Finite beings are finite in so far as they do not have within themselves the ground of their existence, but depend on something else, the infinite being as their cause. For Thomas to be a creature must be understood metaphysically as being through participation, participation signifies the mode of being of creatures’: *ibid.*, 139,140.

forms of existence in their appointed place. It celebrates both the separation which is inherent to diversity and the mutuality inherent to community. Each part (described as good), gains value through its relationship with the whole which is described as very good.

- It is a celebration of mutuality, mutuality that reflects the nature of its creator and of relationality at the heart of humanity. It therefore attests interdependence rather than independence as the state through which health and wellbeing is to be enjoyed. Indeed, it points to the health of the earth as the key to the health of all living things.
- It is a celebration of creation's rhythms, rhythms that cannot be changed or abrogated by humanity. The central rhythm is 'rest'; both an insight into the self emptying God who is present to creation and of the limits inherent to creation's mutuality. It is to the exploration of this principle that chapters 2 and 3 particularly turn.
- It is a celebration of creation blessed with fertility, continuity and abundance. For humanity, blessing is also choice: by the manner in which we live our lives we either live with blessing, or we live beyond its canopy.
- It celebrates life's hallowing. All of creation is associated with God. It is therefore incumbent upon humanity to treat creation with respect, and to be committed to its continuing transformation and renewal.
- It celebrates the dual truths that humanity is both part of the created order and is also apart from it through a commission of responsibility and care. In this respect Sabbath is as much a commentary on work as a principle of rest from it: that is, work is to contribute to mutual wellbeing.
- It acknowledges the paradox that while creation's intention is harmony and mutuality, history's sad record is hostility. Acknowledging, and ameliorating the consequences of human 'kabas' is the subject of the following chapters.

These summary points raise the question of the human vocation, that is the place that humanity should assume within the order of creation when true to itself. Chapter 3 speaks of the crisis of the human vocation which underlies the ecological crisis. The Beatitudes, which preface the Sermon on the Mount, (Mat. 5:1-12), can be loosely translated: 'humanity is in the right place when we are peace makers, when we

hunger and thirst for righteousness, when we mourn over the pain and brokenness of others'. As Rowan Williams¹²⁷ and other thinkers state, the environmental crisis cannot be addressed without addressing humanity's identity and ambition.

These points also raise the question of how orthodox and effective in its mission Christianity can be when it neglects its creational base. Christianity, which through the Reformation and Enlightenment has focussed primarily upon the individual and their redemption, has given inadequate focus to the mutuality God intends between humanity and the nonhuman creation. These issues are taken up in the chapters that follow.

¹²⁷ Rowan Williams, *Renewing the face of the earth: human responsibility and the environment*. (Ebor lecture, York Minister, 25 March 2009), <http://www.archbishopofcanterbury.org/2351?q=ebor> (accessed 3 September 2010).

Chapter 2 The Current Crisis and Search for Sustainability

Tim Jackson¹²⁸ describes the present crisis in the following terms:

*To protect economic growth we have been prepared to countenance – and have even courted – unwieldy financial and ecological liabilities, believing that these are necessary to deliver security and keep us from collapse. But this was never sustainable in the long term. The financial crisis has shown us that it is not even sustainable in the short term. The truth is that we have failed to get our economies working sustainably even in financial terms. For this reason, responses to the crisis which aim to restore the status quo are deeply misguided and doomed to failure. Prosperity today means nothing if it undermines the conditions on which prosperity tomorrow depends. And the single biggest message from the financial meltdown in 2008 is that tomorrow is already here.*¹²⁹

2.1 Sustainability: its current context and its human history

A definition of sustainability is elusive. The word has become emotive and is used in equal measure to speak of a primary industry, a national economy or an ecological system. In this latter respect it is used particularly to relate to loss of bio-diversity and the threat that human activity has become through its dominance. It is also used to speak of levels of population that are deemed too large, growing too rapidly, or which lack adequate infrastructure to support them. It almost always carries with it an ethical overlay. Unsustainable activity has immediate and disproportionate impact upon vulnerable human communities and nonhuman ecosystems. Potentially it also limits choice available to future generations, both human and nonhuman. In public discourse ‘sustainable activity’ is generally deemed ethical while ‘unsustainable activity’ is deemed unethical because of the resulting crisis of equity: and yet there remains unwillingness to act. Mutuality at the heart of creation cannot be ignored without cost. While environmental debt is accumulating, the assumed cost of effective and immediate response is usually deemed too great to justify the political cost to decision makers. Cost is usually magnified while the investment in future sustainability is seldom argued sufficiently.

In this thesis I am using ‘sustainability’ to refer to cause and effect which either threaten or enhance continued life on the planet. I am also exploring principles or

¹²⁸ Tim Jackson is Economics Commissioner on the Sustainable Development Commission to successive UK Governments and Professor of Sustainable Development at the University of Surrey.

¹²⁹ Tim Jackson, *Prosperity without growth: economics for a finite planet* (London: Earthscan, 2009), 33.

rules that undergird all of life, axioms that if understood and applied enhance life and if ignored threaten life. In particular I am examining sustaining principles and rhythms of life that are inherent to Creation Sabbath.

The problems we face are far from new. Charles Birch argues that while there has been a struggle between science and religion for a few centuries, the struggle between ecology and economics has been with us for millennia.¹³⁰

Darwin described evolution as a process of natural selection:¹³¹ survival achieved through adaptation to changing environments. Current scientific data calls for significant human adaptation, to avoid worrying and verifiable changes in complex ecosystems. However, while evolution is almost universally acceded as a scientific verity, there is, strangely, little commensurate commitment to necessary and immediate adaptation in human behaviour to avoid the urgency of impending tipping points.¹³² Tim Flannery¹³³ evaluates the possible threat of three tipping points: the collapse of the Gulf Stream, the collapse of the Amazon rain forests, and the release of methane from the ocean floor. Another matter of serious concern is the possibility of the loss of land-based ice in Greenland or Antarctica. Denial of Darwin's (and Chardin's)¹³⁴ reinterpretation of natural history through the theory of evolution, by people of very conservative religious belief, is well known. However, human economic behaviour which refuses to adapt to growing evidence that remaining indefinitely on the same course is unsustainable appears to be a similar form of denial and does not make sense, even on economic terms. Graphically expressed, it

¹³⁰ 'The unhappy relation between ecology and economics has been with us, not for centuries but for 10 millennia. It began with the agricultural revolution which brought with it villages and towns and the loss of much virgin lands': Charles Birch, *On purpose* (Sydney: New South Wales University Press, 1990), 155.

¹³¹ Dawkins, *The God delusion*, 114ff.

¹³² James Hansen, the lead scientist of NASA Goddard Institute for Space Studies, is one many reputable scientists who speak of tipping points such as the melting of sea ice in the Arctic or more seriously the melting of land based ice in Greenland and Antarctica or the release of greenhouse gases from the melting of the Siberian wasteland. 'The gap between public perception and scientific reality is now enormous. While some of the public is just becoming aware of global warming, the relevant scientists – those who know what they are talking about – realize that the climate system is on the verge of tipping points. If the world does not make a dramatic shift in energy policies over the next few years, we may well pass the point of no return': James Hansen, *Storms of my grandchildren: the truth about the coming climate catastrophe and our last chance to save humanity* (London: Bloomsbury, 2009) 171.

¹³³ Tim Flannery, *We are the weather makers: the story of global warming* (Melbourne: Text Publishing, 2006), 177ff.

¹³⁴ Teilhard De Chardin, *The phenomenon of man*.

appears humanity would rather perish than change the pattern of contemporary economic activity. Prevailing economic wisdom is that human wellbeing is dependent upon economic growth, but such an assumption ignores the reality that economic growth must first reckon with ecological health.¹³⁵

While humans as a species have survived and flourished in the past where other species have not, Jared Diamond asks whether human civilisation is now in danger of collapse, mirroring on a global scale what previously was quarantined to relatively localised communities.¹³⁶ In his seminal work *Collapse*,¹³⁷ Diamond chronicles the collapse of many past civilisations including the population of Easter Island, the Maya, and the Norse of Greenland. In each case he cites as the primary reason for collapse an inability to live appropriately and sustainably with the known resources and essential ecological balances of the territory they occupied. He speaks of repeated failure to anticipate and failure to perceive and understand the implications of long term strategies, as common features across various groupings and pages of history.¹³⁸ The consequences in each case were utterly disastrous.

The point of Diamond's observations is that the problem of sustainability is not a problem of the ecology but a problem of the human condition.¹³⁹ Moltmann describes it thus:

What we call the environmental crisis is not merely a crisis in the natural environment of human beings. It is nothing less than a crisis in human beings themselves. It is a crisis of life on this planet, a crisis so comprehensive and so irreversible that it cannot unjustly be described as apocalyptic. It is not a

¹³⁵ 'Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature': Wesley Granberg-Michaelson, *Redeeming the Creation: the Rio Earth Summit: challenges for the churches*. (Geneva: WCC Publications, 1992), 86.

¹³⁶ 'I have not met anyone who seriously argues that world could support 12 times its current impact, although an increase of that factor would result from all Third World inhabitants adopting First World standards of living ... what will happen when it finally dawns on all those people in the Third World that current First World standards are unreachable for them, and that the First World refuses to abandon those standards for itself': Jared Diamond, *Collapse: how societies choose to fail or survive* (London: Allen Lane, 2005), 495-496.

¹³⁷ *ibid.*

¹³⁸ 'Thus human societies may make disastrous decisions for a whole sequence of reasons: failure to anticipate a problem, failure to perceive it once it has arisen, failure to attempt to solve it after it has been perceived, and failure to succeed in attempts to solve it': *ibid.*, 421.

¹³⁹ 'It is painfully difficult to decide whether to abandon some of one's core values when they become incompatible with survival. At what point do we prefer to die than compromise and live?': *ibid.*, 433.

*temporary crisis. As far as we can judge, it is the beginning of the life and death struggle for creation on earth.*¹⁴⁰

In a paper delivered in the lead up to the 2009 United Nations Climate Change Conference in Copenhagen, the Archbishop of Canterbury¹⁴¹ pointed out that the future of the planet is not in question; what is in doubt is the capacity of human beings to live sustainably in and with the world of which they are a part. As the Archbishop said, we should not be speaking of an environmental crisis or of an ecological crisis but of a crisis of human vocation. What has happened in the past in relatively small and pocketed areas of human life can now possibly occur on a global scale, such is the measure of the dilemma we face. The irony for human beings in the developed world is that we feel in a safer, more sustainable state than in any previous generation. We live longer, our health is considerably better, and our standard of living is infinitely superior even to that of the generation that has immediately preceded us. Scientific discovery in a vast range of fields has provided us with an unprecedented sense of security and optimism, but is it justified? Such optimism is based upon the strength of our material assets rather than the health of our relationship(s) with the whole created order (common wealth). Our state is somewhat reminiscent of the encounter between Jesus and the rich young man ‘*what do I still lack? ... sell your possessions and follow me*’. (Mat 19:16-22). Few would argue against the principle of sustainable living, as long as it does not impact freedom to live as the individual chooses.

A search and yearning for a proper understanding of the relationship between humanity and creation is not new, as the following extracts from the writing of Francis Bacon in the 17th century illustrate:

*The knowledge and the power of man coincide, because ignorance of the cause involves the loss of effect. For we can only conquer nature by submitting to her; and that which is in contemplation occupies the place of the cause, in operation takes that of the rule.*¹⁴²

For God on the first day of creation created light only and allowed a whole day for that work, nor did he create anything material on that day. In like manner in every kind of experience we must first elicit the discovery of true causes and true axioms

¹⁴⁰ Moltmann, *God in creation*, xi.

¹⁴¹ Williams, *Renewing the face of the earth: human responsibility and the environment*.

¹⁴² Francis Bacon *Novum Organum: or, True suggestions for the interpretation of nature*, trans. Andrew Johnson (London: Bell and Daldy, 1859), 12.

*and must look for experiments which produce light and not those which produce fruit.*¹⁴³

Bacon studied and wrote immediately prior to the period which came to be known as the Enlightenment; his starting point took for granted the verities of scripture and Church. The Enlightenment displaced God with the human person at the centre of the universe. While it did not remove religion as a contributor to public discourse about meaning and values, it did change the ground upon which such discourse would in future take place. By no means all, or even the majority of, thinkers rejected a theistic view of the world. The German mathematician philosopher, Gottfried Wilhelm Leibniz, through his mathematical study was to proclaim that God created the best world that was possible: '*Reality cannot be found except in one single source because of the interconnection of all things with one another*'.¹⁴⁴

While the Enlightenment was fundamentally about human reason, in its questioning of institutions, especially the Church, it also transformed social order, as can be illustrated in France's motto: *liberté, égalité, fraternité*.

The Enlightenment gave rise to a new understanding of the individual. The rise of the individual in their own right, through the teaching of John Locke and others, paved the way for a new understanding of property rights and the development of capitalism.¹⁴⁵ While Locke understood the ethical issues of inequality, nevertheless in his thinking he placed no theoretical limit on the amount of wealth an individual could accumulate.

The period known as the Enlightenment produced rich fruit in the development of the sciences, freedom given to individuals and to modern democracy; but there are also outcomes that have carried forward into the contemporary age that need reassessment if sustainability is to be enjoyed by current and future generations on the planet. It is not sufficient simply to apply technological solutions. The ideas that gave rise to the assumptions by which we live and negotiate; conscious or

¹⁴³ *ibid.*, 52.

¹⁴⁴ Gottfried Wilhelm Leibniz, *New essays on human understanding* (Cambridge: Cambridge University Press, 1705).

¹⁴⁵ Adam Smith built upon the ideas of John Locke.

unconscious, also need to be challenged as the need for sustainability becomes more urgent. These outcomes include:

- A focus on the individual and individual rights that makes commitment to ‘common wealth’, a concept foundational to sustainability, far more difficult to secure.
- Individualistic behaviour has also become a feature of groups of people including nation states which predictably choose self interest before global best interest. The Enlightenment strengthened the idea of independent nation states which have subsequently enjoyed the benefits of global trade, but have strongly resisted international cooperation to address the problems that a global community has created. Such co-operation is resisted on the basis that it is perceived to reduce autonomy and self interest.
- While capitalism owes much to Enlightenment ideas, unregulated capitalism which has become a feature of modern society is not a necessary outcome of those ideas. Regulation needs to be enacted which will help reduce inequity and deliver a price mechanism to control carbon emission, and at the same time deliver greater choice to the poor.
- Since the Enlightenment the Western Church has largely retreated from robust theological engagement in creation theology, focussing through its liturgy, preaching and general discourse on redemption theology.¹⁴⁶ This may be a response to the accentuated importance given to the individual in western culture; it may also be a retreat into an area of discourse with which the Church feels comfortable and through which it strengthens its membership. It has given Christianity an image in the secular world of an institution which is primarily interested in judgement upon matters of personal morality and piety, while having very little to say about the great challenges that face human and nonhuman creation alike at the commencement of the 21st century.¹⁴⁷

¹⁴⁶ Barker, *Creation: a biblical vision for the environment*, 11-12.

¹⁴⁷ ‘It is small wonder that theology is regarded by so many as irrelevant if it does not concern itself with what is happening in the real world in which we all live’: Hugh Montefiore, *The question mark: the end of homo sapiens?* (London: Collins, 1969), 44.

At the end of the end of the 18th century Thomas Malthus infamously took up the cause of sustainability. His argument was that population increase would automatically be checked by famine or disease.¹⁴⁸ That he was wrong,¹⁴⁹ is largely attributable to the fact that he wrote just prior to the technological advances that the industrial revolution would bring. But it would be very foolish for humanity to assume that technology can continue to produce such a miracle, and thus relieve humanity from its responsibility to change.¹⁵⁰

Contemporary developments include the launch of the Club of Rome in 1968 and the publication in 1972 of its initial findings: *Limits to Growth*.¹⁵¹ While that report is now deemed overly pessimistic, the principles it addresses are no less urgent; the difference being that the intervening almost 40 years have produced greater scientific clarity and focus upon the areas of human activity that need most urgent attention. Also, the establishment of the Earth Charter,¹⁵² after extensive international consultation, at the Peace Place in the Hague on June 29 2000, exists to foster a just, peaceful and sustainable global society in the 21st century.

What is now required, from both science and religion, is a new narrative which breaks through perceived and inappropriate assumptions and adequately addresses the realities of the contemporary world.

2.2 Sustainability: background to a considered approach

The industrial revolution changed and magnified human capacity to adapt and utilise nonhuman creation for human benefit. It also changed the way economic life was understood, giving to it a central place, thus attributing to productivity a higher priority than sustainability:

¹⁴⁸ Thomas Malthus, *An essay on the principles of population* (Oxford: Oxford University Press, 1999), 61.

¹⁴⁹ The world's population is now six times larger than it was in his day and the world economy 68 times bigger: Jackson, *Prosperity without growth: economics for a crowded planet*, 6.

¹⁵⁰ 'All that is needed to remain within ecological limits is for (technology driven) efficiency to outrun scale. But historical evidence for the success of this strategy is deeply unconvincing': *ibid.*, 121.

¹⁵¹ *Limits to growth: a report for the Club of Rome's project on the predicament of mankind*. (New York: Universe Books, 1972).

¹⁵² *Earth Charter* <http://www.earthcharterinaction.org/content/pages/Read-the-Charter.html> (accessed 16 October 2010).

The next great leap was that of the great eighteenth century Scottish economist Adam Smith. If Calvin had allowed the moneylenders a place in the kingdom of heaven, Smith opened the way to placing the world of commerce and finance on the same morally impregnable level as the world of nature. It was Smith's work that allowed his contemporary Edmund Burke to state, "The laws of commerce are the same as the laws of nature and therefore the laws of God"'.¹⁵³

Smith saw people being raised from poverty as a consequence of economic reform which focussed on competition and market forces; a position enthusiastically embraced in recent times by Margaret Thatcher, Ronald Reagan and John Howard. The theory being that human achievement arises from competition, and that self-interested endeavour leads to collective prosperity. That this principle cannot be exclusively relied upon to deliver altruistic values can be illustrated in the growing gap in economic fortunes between the super rich and average citizens, let alone the gap between the developed and the underdeveloped peoples of the world. After only two decades of economic liberalisation a similar gap now threatens the stability of the People's Republic of China. As great as these disparities have become, of even greater concern is the growing disparity of health and wealth between humanity and nonhuman creation. If humanity grows richer as nonhuman creation grows poorer, then such wealth is illusory. It cannot last, because, as argued above, human wellbeing is ultimately dependent upon the wellbeing of the created order.¹⁵⁴

As the eighteenth century progressed, opposition to commercialism that did not give serious thought to human wellbeing and that despoiled nature became articulately expressed by the likes of William Blake, Charles Wordsworth, the Bronte sisters, Elizabeth Barrett Browning and Charles Dickens, who wrote:

It was a town of machinery and tall chimneys, out of which interminable serpents of smoke trailed themselves forever and ever and never got uncoiled. It had a black canal in it, and a river that ran purple with ill-smelling dye, and vast piles of building full of windows where there was a rattling and a trembling all day long, and where the piston of the steam engine worked

¹⁵³ Stephen Green, *Good value: reflections on money, morality and an uncertain world* (London: Allen Lane, 2009), 70.

¹⁵⁴ 'Finally, and perhaps most obviously any credible vision of prosperity has to address the question of limits. This is particularly true of a vision based on growth. How and for how long is continued growth possible without coming up against the ecological limits of a finite planet': Jackson, *Prosperity without growth: economics for a crowded planet*, 5.

*monotonously up and down like the head of an elephant in a state of melancholy madness.*¹⁵⁵

Today the prophetic voices that critique the overwhelming dominance of the free market and its dependence upon 'growth' are far less clear than they were in Dickens' time. (Clive Hamilton, Jeffrey Sachs, James Lovelock, and Tim Jackson are exceptions). Few are willing to question the assumptions upon which economic policy is predicated, let alone suggest a possible alternative. The assumption that free market driven enterprise necessarily pulls the disadvantaged out of poverty continues, as does the proposition that 'progress' will necessarily create for the people of tomorrow a world that is better than the world of today.¹⁵⁶ Politicians in all developed economies speak of 'growth' not only as a given, but with an assumption that a world without economic growth would be a world facing a new dark age. When faced with a choice between maintaining economic growth and protecting ecological systems, the decision favours economic growth. Ironically, the protection of ecological systems does not mean that continued growth is not possible, but it does mean a shift towards the valuing of "common wealth".¹⁵⁷ Jeffrey Sachs argues that the fundamental flaw of contemporary economic systems is the assumption that human thriving is related primarily to private wealth rather than shared goals for the common good.¹⁵⁸ His argument is that human thriving is dependent upon the health of all that we hold in common, not least the health of the natural order. The desperation of the situation is pointed out by writers such as Clive Hamilton, most ominously in his most recent publication *Requiem for a Species*.¹⁵⁹

¹⁵⁵ Charles Dickens, *Hard times* (London: Bradbury & Evans, 1854), quoted in Green, *Good Value: reflections on money, morality and an uncertain world* 72.

¹⁵⁶ 'Many presume that the transition from an organic to a mineral economy is the necessary condition for release of humanity from poverty and ill health. However, the physical limitations of the earth's carbon cycle represents a fundamental challenge to this foundational assumption in modern political economy': Michael S. Northcott, *A moral climate: the ethics of global warming* (London: Darton Longman & Todd, 2007), 91.

¹⁵⁷ It is estimated that the cost of driving Australia to a zero carbon economy by 2020 would be \$37 billion a year for 10 years or approximately 3 per cent of GDP. Such a plan is not on any political agenda but it illustrates that a reduction of 20 per cent by 2020 is far from economically irresponsible. Manning, Paddy. 2010. 'Zero carbon plan better than two zero credibility choices', *Sydney Morning Herald*, 24 July, <http://www.smh.com.au/business/zero-carbon-plan-better-than-two-zero-credibility-choices-20100723-10os6.html> (accessed 12 October 2010).

¹⁵⁸ 'The defining challenge of the twenty-first century will be to face the reality that humanity shares a common fate on a crowded planet. ... The paradox of a unified global economy and divided global society poses the single greatest threat to the planet because it makes impossible the cooperation needed to address the remaining challenges. Sachs, *Common wealth: economics for a crowded planet*, 3, 7.

¹⁵⁹ Hamilton, *Requiem for a species: why we resist the truth about climate change*, 30-31.

It is therefore increasingly urgent that the general public and its decision makers, as well as the Christian community, be drawn into a debate which helps to define the relationship between humanity and the nonhuman creation.

Heinrich Bedford-Strohm¹⁶⁰ helpfully suggests three possible ways of defining that relationship:

- A utilitarian anthropocentrism that radically subordinates nonhuman nature to the interests of humanity.
- A nature centred approach that sees humanity embedded in nature, equal with any other part of creation, and
- An anthropocentrism of responsibility that affirms the dignity of nature while acknowledging a conflict between humanity and nonhuman nature.

While no alternative is in itself a statement of sustainability Heinrich Bedford-Strohm usefully separates three distinct approaches. The first is equally implicit to market driven economic ideology and to much conservative religious dogma.¹⁶¹ The second is used pejoratively by both sides of politics to stereotype the environmental movement and justify the status quo. The third, Bedford-Strohm suggests, should become the starting point for response to the crisis we all face: it reflects the paradox we have examined in Gen 1:26-28 that while humanity is commissioned with care of creation, *kabas*, domination and the exercise of unequal power is history's record.

2.2.1 Nature subordinated to human interest

The twentieth century has witnessed astonishing achievements of human ingenuity in which nature has been subordinated. Halfway through the century, Australia's ability to turn the eastward flowing Snowy Mountains River westward was herculean, but its ecological downside was not anticipated. A belief that nature could or should be conquered was what mattered. Other achievements have included the production of genetically modified products including timber and food. Less proud

¹⁶⁰ Heinrich Bedford-Strohm, "Tilling and caring for the earth: public theology and ecology," *International journal of public theology* vol. 1, no. 2 (2007) 230.

¹⁶¹ For example: *Environment and climate change* (Christian Democratic Party policy statement) <http://www.cdp.org.au/federal-policies/environment-and-climate.html> (accessed 15 October 2010).

achievements have seen huge and continuing reductions in the world's rainforests, and the replacement of complex ecological systems with large scale monocultures of which the palm oil industry is a good but unfortunate example. Some of this subordination has been motivated by the desire to increase desperately needed food production, some for energy production, and yet others to meet less than permanent foibles of human fashion (bio-fuels, cosmetics, and the human desire for year round production of seasonal foods). It is now realised that such large scale subordination is not cost free, either to ecosystems or to humanity. It is rare for the costs to be fully weighed before such major undertakings begin, or if they are, the costs are greatly undervalued or not understood.¹⁶²

All the wealth that is enjoyed in the Big Economy (that is the global economy) is ultimately derived from the Great Economy (the natural environment).¹⁶³ As has been argued above, human beings are not separate from the great economy. The great economy, under stress, is inclusive of humanity who inevitably will also be under stress. That is the position: we are.

2.2.2 A nature centred approach

One of the reasons why the environmental movement is despised by those resistant to change is because restraint is perceived to diminish human aspiration and wellbeing. Taken to an extreme it is understood to mean that no animal can be killed, no tree cut down, no habitat disturbed. This approach is strongly resisted by the farming and mining industries alike. It is vitally important that Christian debate, especially in synods, presents sound creation theology. This theology should encourage the natural inclination of farmers to care for their land, rather than engage in a language of polemics which the farming community interprets as an attack upon them. Genesis 2:1-4, as a summary of the first creation story, supports the position that humanity with all other species is equally placed in being formed from the *adamah*. However, the text makes it equally clear that humanity is commissioned with care toward the created order, and is responsible for its health and wellbeing.

¹⁶² Tim Flannery *The Future Eaters* (Grove Press 2002).

¹⁶³ A concept developed by the American novelist Wendel Berry and built upon by the South African theologian Steve de Gruchy in his concept of the Olive Agenda. In this imagery the Big Economy equates to the world economy of trade, stock markets and mortgages while the Great Economy is the total environment created by God.

Indeed, Genesis 2:4b-3:24 addresses the consequence for humanity and for creation when this responsibility is ignored, or refused.

Genesis 2:1-4, in summary of the first creation account, implies there is no independence outside the relationships humans have with God, others and the whole created order. Further, there is no freedom outside acceptance of the limitations that fidelity to those relationships demands. It is 'knowing' that we live in these relationships that makes us incurably social beings and means that our approach to the created order has to be worked out together, not individually. Teilhard de Chardin¹⁶⁴ argues that 'knowing' is humanity's great and needed contribution to the whole created order; indeed, a contribution withheld results in the suffering of the created order. Tim Flannery argues a similar point.¹⁶⁵ Understanding the natural order, working within and honouring its limits and assisting its inbuilt interdependence, is part of the human vocation, a concept perhaps long understood by the Australian Aboriginal people, a concept that should be second nature to people of religious faith.

2.2.3 An Anthropomorphism of responsibility:

The conflict between the need to respect the integrity of creation, and humanity's need for further development through the harvesting of natural resources is graphically described by Gorshkov, Gorshkov and Makarieva:

*Humanity is facing two contradicting phenomena – the inevitability of the development of civilisation and the impossibility of an equally rapid development of the biosphere. In other words, while civilisation develops, the biosphere degrades ... One needs to confine civilisation's development within such limits that would make it possible to ensure the safe existence of the biosphere....*¹⁶⁶

Recognising that there is a crisis of competing but unresolved conflict between the needs of humanity and the needs of the creation upon which humanity depends is the first necessary step towards a life pattern of sustainability. While the conflict remains unrecognised, ignored or denied, the necessary trigger which mobilises political

¹⁶⁴ Teilhard De Chardin, *The phenomenon of man*, 37-40.

¹⁶⁵ Tim Flannery, *Here on Earth* (Melbourne: Text Publishing, 2010).

¹⁶⁶ Victor G. Gorshkov, et al. *Biotic regulation of the environment: key issues of global change* (Chichester: Praxis, 2000), 316.

action and decision making is missing. We have noted the anticipation of conflict in the creation narrative which endows humanity with the capacity for *kābaš* (subdue).

It is neither possible, nor desirable, to ignore the challenge that seven billion people need to be fed and housed and that their way of life must be raised out of degrading poverty which is itself a threat to ecological sustainability. It is observably true that the poorest of the world are poor in part because of ecological collapse. It is also true that ecological collapse is most obvious in and around those communities whose very poverty removes any capacity to choose in favour of sustaining diversity, or of harvesting without diminishing soil, plant and animal species alike. The worst aspects of human exploitation and greed impact upon both the poor of the world and the integrity of creation.

Nor is it possible to ignore the reality that the integrity of creation is under severe threat. Palaeontologists¹⁶⁷ tell us that we live in the era of the sixth great extinction.¹⁶⁸ While extinction is part of historic evolutionary processes, the current extinction rate has only been matched a very few times in geological history. The freshwater ways of the world are under great stress. The great forests of the world have been diminished at an astonishing rate, in part because of logging, but equally because subsistence farmers burn to increase the area of land that will graze their stock or grow their crops. And by no means least, the burning of carbon has contributed to an increase in atmospheric carbon dioxide density from approximately 280 parts per million in the pre-industrial age to a current figure of approximately 380 parts per million.¹⁶⁹ Because of carbon's life cycle, no matter what ameliorating steps are taken by humanity, the percentage will inevitably grow to at least 450 parts per million by 2050, trapping even more heat radiation and thus raising the average temperature on the planet.¹⁷⁰ While it appears little can be done to prevent this

¹⁶⁷ Such evidence can be found at the website of the Earth Policy Institute Washington DC (<http://www.earth-policy.org/>) and in Eldredge, Niles. *The sixth extinction*. <http://www.actionbioscience.org/newfrontiers/eldredge2.html> (accessed 16 October 2010).

¹⁶⁸ The fifth great extinction being at the end of the Cretaceous period which saw the extinction of the dinosaurs.

¹⁶⁹ Sachs, *Common wealth: economics for a crowded planet*, 69.

¹⁷⁰ This figure is quoted by many agencies as the benchmark to which mitigation efforts should be aimed. Agencies using the figure include The International Panel on Climate Change (IPCC), the International Energy Agency, UK Climate Ark in its 2007 report, and the Climate Institute of Australia.

increase, it is essential that serious steps be taken to ensure the last figure is not exceeded.

Christianity is no stranger to truths understood through antinomy¹⁷¹ and is therefore in a good position to contribute to a debate which involves reconciling the irreconcilable. Christian theology witnesses that truth may lie not in upholding a singular proposition, but in balancing two seemingly irreconcilable opposites. Human mouths need to be fed and human communities must be housed. But of equal importance, the nonhuman creation must retain its diversity and be able to regenerate through its natural life cycles.

A recent response to this dilemma has been *The Olive Agenda*,¹⁷² a Christian insight into what sustainability might look like through the window of Sabbath, as these competing tensions are held in balance. Olive is the colour that is produced when green and brown are mixed. The colour green represents the integrity of creation while brown represents the poverty and need of humanity. Addressing sustainability and poverty are not alternative choices; failure to address one is to fail the other. The olive tree has long been a metaphor for peace, for fruitfulness, for continuity across generations. It speaks of partnership with the land rather than imposition upon it. The olive metaphor is reliant upon another, defining the whole created order, including humanity, as a single house. According to its Greek derivation the word ecology means the doctrine of the house 'ὄικος'.¹⁷³ It is to the balance required of life in a single house that we turn, as we seek a model of sustainability that does justice both to human need and to ecological sustainability. In 1997 the Evangelical Church in Germany issued a fine statement:

The goal of sustainability focuses on responsibility for creation. In biblical thinking this dimension of responsibility is grounded in the idea of human beings being created to live among fellow human beings being created to live among fellow creatures (Genesis 1-2; psalms 8 and 104). They share the same destiny as all created life and have special responsibility for the rest of creation. They are supposed to till and care for the earth (Gen, 2:15) i.e. by

¹⁷¹ Antinomy relates to contradiction existing between two apparently indubitable propositions, for example: God is three God is One; Jesus is God, Jesus is man.

¹⁷² Stephen de Gruchy, *Oikos God and the olive agenda: theological reflections on economics and the environment*, <http://www.sacc.org.za/news07/oikos.html> (accessed 3 September 2010).

¹⁷³ Moltmann, *God in creation*, xii.

*cultivating it to make and keep it habitable. The special position of human beings does not mean they have the right to treat non-human creation in an arbitrary or exploitative way. Rather it commits them to a reverent stewardship of God's creation, based on care, economy and conservation.*¹⁷⁴

2.3 Sustainability: A possible conversation between Science and Christianity *(A view of the world in the light of Jesus the Messiah)*¹⁷⁵

Teilhard de Chardin in the *Phenomenon of Man*¹⁷⁶ suggests that in the fields of human knowledge and discovery, science, religion and philosophy need one another. Science cannot of itself deal with a world addicted to consumerism or greed. Christianity's scriptures offer a particular understanding, or ordering, of the world; they speak of the relationship humans must have with creation and to one another. Christianity's claim is of course focussed upon Jesus, especially his death and resurrection which reveals to us both the shock that divine nature is better understood from the perspective of a towel and a bowl of water than a throne, and that true humanity is not exhibited through conquering and exploiting but through serving and relating. It is these truths, it is argued, that are undergirded by the Sabbath text. Sabbath insight provides the space through which we are able to understand ourselves in relation to everything else.

Covenantal theology, the binding of parties, profoundly shapes both Judaism and Christianity. Great interest is maintained in the 'historic covenants' that outline God's redeeming intention both for His people and also for the world: relatively speaking far less attention and understanding has been given in recent decades to the creation covenant, the 'binding of creation'. And yet without a proper understanding of the creation covenant, and creation theology, we cannot properly understand to what and for what we are being redeemed: *'Throughout Hebrew Scriptures a creation covenant is assumed but little noticed now-a-days because scholarly interest has been largely confined to the "historic covenants"'*.¹⁷⁷ The absence of emphasis on the creation covenant has significantly reduced commitment to creation in the minds of people of faith and reduced its antidote to the emphasis redemption

¹⁷⁴ *For a future founded on solidarity and justice: a statement of the Evangelical Church in Germany and the German Bishops' on the Economic and Social Situation in Germany, 1997,* <http://www.ekd.de/english/1729.html> (accessed 3 September 2010).

¹⁷⁵ Moltmann, *God in creation*, 5.

¹⁷⁶ Teilhard de Chardin, *The phenomenon of man*, 32.

¹⁷⁷ Barker, *Creation: a biblical vision for the environment*, 122.

theology makes upon the individual. *'I will remember my covenant which is between me and you and every living creature of all flesh'* (Gen 9:15-16), the creation covenant draws us into mutuality at the heart of life. When God creates, God binds. Creation is bound together because it is also bound to its creator. As we have argued, humanity is commissioned to contribute to this binding, through which all of life is enabled to flourish. The binding of all things, mutuality at the heart of creation, is a distinctive feature of the creation narrative, but it is also affirmed by scientific enquiry as can be illustrated:

1. **Creation is imbued with wisdom.** *'The Lord God created me (wisdom) at the beginning of his work, the first of his acts long ago'* (Prov 8:22). The human vocation is to understand that wisdom and to live within it.¹⁷⁸ The tension which is referred to above between the needs of an expanding humanity and the needs of the nonhuman creation has in our time resulted in a resistance to accept, understand, and live with this wisdom, whether it is conveyed through the results of scientific enquiry or taught as part of religious discipleship. Scientific research makes clear the complexity of ecological systems and their frailty when equilibrium is pushed beyond its natural elasticity and capacity for renewal. Religious discipleship exalts the virtues of justice, righteousness, harmony and wholeness as expressions of true wisdom and as appropriate principles to undergird human choices. Thus science and Christian faith alike make clear that these choices impact the course that human history will take. Christianity additionally refers to and anticipates the harmony that is the destiny that God intends through Jesus in the new creation: *'I consider that the sufferings of the present world are not worth comparing with the glory about to be revealed to us. For the creation waits with eager longing for the revealing of the children of God'* (Rom 8:18,19). And *'He is the image of the invisible God, the first born of all creation; for in him all things in heaven and earth were created ... For in him all the fullness of God was pleased to dwell, and through him God was pleased to reconcile all things to himself'* (Col 1:15-20).

¹⁷⁸ Mark Hathaway and Leonardo Boff, *The Tao of liberation* (New York: Orbis Press, 2010), 1ff.

2. **Creation should be understood as a single entity.** It is the whole that gives integrity to the parts. The creation narrative leads us to understand our identity in relation to God, to one another and to the whole created order. Indeed our individuality springs out of the embrace of those relationships and the fidelity that they demand. Again, this is not simply a theological understanding of the world; it is also a scientific one. Lovelock has focussed on this theme through his many writings and in particular in his use of the Gaia¹⁷⁹ imagery. Similarly, Lorenz¹⁸⁰ developed what came to be known as the butterfly effect; that is: when a butterfly flaps its wings in South America, the weather patterns in Europe change. This metaphor is related to chaos theory: because the whole created order is an integrated system, a small interference at one point can cause an exaggerated and unwanted effect at another. The place chaos theory, in this sense, holds within a theological framework is contested; however what is not contested in either science or religion is that being separated or apart is death. Religion also asserts that to be reconciled or redeemed is life (John 20:30-31). The unity of all things becomes an incarnated truth in Jesus in whom the whole created order finds its redemption and fulfilment (Col 1:15-20).
3. **Sustainability must be built on principles of equity.** Scientific observation confirms that if one species thrives at the expense of another, its own flourishing is ultimately under threat. Each must contribute to the thriving of the other. For humans, increased power, position or abundance, extends responsibility to act for the wellbeing of the poor, disadvantaged or threatened amongst fellow human beings or nonhuman creation. This argument is strongly made in Pearse's *High and Dry*, a critical examination of the Howard era's refusal to enact appropriate climate change policy because of a fear that advantage over others would be lost.¹⁸¹ It is the same

¹⁷⁹ Lovelock, *The vanishing face of Gaia: a final warning*. Lovelock, an influential and original thinking English scientist, claims that his friend William Golding was the inspiration behind the name, but clearly Lovelock is the mind behind the thinking that creation should be considered a single living organism.

¹⁸⁰ Edward N. Lorenz, "Deterministic nonperiodic flow," *Journal of the atmospheric sciences*, vol.20, no.2 (March 1963), 130-141.

¹⁸¹ 'There is one thing I am frozen in time about and that is determination to protect the industries of this country that give us a natural competitive advantage. I am frozen in time on that because I believe in the coal industry and I believe in preserving the competitive advantage we now have and

argument made much earlier by the prophets of the Old Testament who argued that any advantage the Israelites might have as the chosen people of God was abrogated if they did not act with justice or care for the poor and needy. *'I hate, I despise your festivals and I take no delight in your solemn assemblies ... But let justice roll down like waters and righteousness like an everflowing stream'* (Amos 5.21-24). It is also the same argument made by Jesus in his teaching on the use of power (Mk 10:35-45) and the care of those in need (Mat 25:31-46).

2.4 Conclusion

The search for sustainability is complex, with seemingly inevitable conflict between the human need for resources and creation's dependence on environmental health. The thesis concludes the following to be worthy of further exploration:

- The crisis faced by the created order, inclusive of humanity, at the beginning of the 21st Century is multifaceted. Searching for sustainability by addressing one component of the crisis without addressing the others will be insufficient; indeed addressing one component without addressing the others may well make matters worse.
- It is a crisis of ecosystems and their capacity to withstand the continued onslaught of the human appetite.
- It is a crisis of human economic systems that are dependent upon growth for their health, growth that is simply unsustainable given the finitude of the planet.
- It is a crisis of inequality, inequality between human beings and more especially a growing inequality between human beings and nonhuman creation.
- Finally, it is a crisis of the human vocation which seeks fulfilment through consumer goods rather than through the rich diversity of relationships, human and nonhuman, for which we were created.

that is why, that is why we didn't sign Kyoto. Because Kyoto could well have put us at a competitive disadvantage'. John Howard, (press conference transcript, Parliament House, Canberra 8 November 2006), quoted in Pearse, *High & dry: John Howard, climate change and the selling of Australia's future*, 138.

A sustainable life for human and nonhuman existence on this planet cannot now be taken for granted. In the midst of this challenge where can wisdom be found? The voice of science must be heard and heeded. However, a companion voice, the Christian creation story lived through its Sabbath, can turn scientific fact into transformative narrative. It is to this voice we now turn for commentary on these crises.

Chapter 3 Crises of Sustainability and the Sabbath Response

3.1 Summary of Linkages

The thesis brings Creation Sabbath (Chapter 1) into conversation with the quest for sustainability (Chapter 2). The following summarises key linkages:

1. Conclusions to Chapter 1 (page 35) set out a summary of the insights that Creation Sabbath brings to the quest for sustainability.
2. Creation Sabbath's primary focus is 'rest', the acceptance of limits that enable renewal and restoration. (Introduction, page 7; Chapter 1, pages 25-27). Ecological health is dependent upon limits being placed on unsustainable human exploitation.
3. Creation Sabbath celebrates separation and unity, diversity and community (Chapter 1, pages 18-20). This poses a profound question for humanity at the commencement of the 21st century, where emphasis upon the individual severely restricts commitment to 'common wealth'.
4. The historical background (Chapter 2:1) highlights the developed prioritising of the individual over 'community or 'common good'. It addresses the critique that Creation Sabbath brings to this position and the difficulty this priority presents in the quest for sustainability (page 41).
5. Three possible ways of describing human engagement with nonhuman creation are presented. It is suggested that the most helpful starting point is to recognise conflict between the human responsibility to care for creation and the human need for resources (Chapter 2, pages 47ff). This reflects the dilemma posed by Creation Sabbath's acknowledgement of *kabas* (pages 22-23).

These linkages are brought into focus through an examination of the interrelated crises the thesis has highlighted.

3.2 The crisis of ecological sustainability

Addressing ecological sustainability meets with resistance because it is assumed that material prosperity will be put at risk. But what if this prosperity has resulted from irresponsibility?

*This has been an age of global prosperity. It has also been an era of global turbulence. And where there has been irresponsibility, we must now clearly say the age of irresponsibility must end.*¹⁸²

Human beings live in community with the whole created order: *'We shall see him (humanity) as a microcosm in which all previous creatures are to found again, a being that can only exist in community with all other created beings and which can only understand itself in that community'*.¹⁸³ Modern humanity struggles to maintain this mutuality when so much prosperity has been built upon the capacity to exploit a resource without the obligation to maintain the inherent health of its origin. By way of contrast, the modern ecological movement is built upon *'a consistent refusal to fragment the world into separate and independently existing parts'*.¹⁸⁴

The complexities of creation and their implications for humanity are explored throughout the whole of Genesis 1-11. As we have argued, creation's blessing is wrapped for its security and health in the idea of rest. Blessing is a constant, human capacity to live within the 'rest' with which it is embraced is the variable. Sabbath rest celebrates the limitations implied by faithfulness to the source of blessing: relationship with God with others and the nonhuman creation. To live sustainably is to be committed to the preservation of the complex relationships that sustain the created order and to oppose human activity which seeks to benefit at the expense of these foundational webs of life.

Fidelities revealed by Creation Sabbath, fidelities that undergird harmony and justice, should be non-negotiable for people of faith. It should not be possible for Christians to argue that engagement with the climate change debate is a lower order matter than evangelism. Dietrich Bonhoeffer puts it succinctly:

In Christ we are offered the possibility of partaking in the reality of God and in the reality of the world, but not the one without the other. The reality of God discloses itself only in setting me entirely in the reality of the world and when I encounter the reality of the world it is always already sustained,

¹⁸² Gordon Brown (former British Prime Minister) quoted in Jackson, *Prosperity without growth: economics for a finite planet*, 17.

¹⁸³ Moltmann, *God in creation*, 186.

¹⁸⁴ Primavesi, *From Apocalypse to Genesis: ecology, feminism and Christianity*.

*accepted and reconciled in the reality of God. This is the inner meaning of the revelation of God in the man Jesus Christ.*¹⁸⁵

It is important that the perspective of faith combines with the insights of science to insist upon limitations which will curb industry's dependence upon non-renewable energy sources, and at the same time encourage the flourishing of all that will sustain life for future generations. Large segments of Christian membership remain entirely silent on urgent matters of ecological and social debate. The seriousness of this position is starkly stated by Bateson:

*If you put God outside and set him vis-à-vis his creation and if you have a notion that you are made in the image of God you will naturally see yourself outside and against the things around you. The environment will seem to be yours to exploit. If this is your estimate of your relation to nature and you have an advanced technology, your likelihood of survival will be like that of a snowball in hell.*¹⁸⁶

3.3 The crisis of economic sustainability

Creation is governed by principles that scientific research progressively reveals and into which religious faith grounds us. Human activity, especially economic activity, is not so constrained. Simone Weil writes:

*Men are not the impotent play things of fate; they are entirely active beings; but their activity is at each moment limited by the structures of society which they form among themselves, and only modifies that structure in its turn by a ricochet, once it has modified the relations between them and nature.*¹⁸⁷

Why have we chosen to build the materialistic, consumer orientated, economic system that now dominates the global market, or has it happened despite us? The anthropologist Grant McCracken suggests that consumer goods provide us with a bridge to our highest ideals. They fail, but in failing they leave open the need for future bridges and so stimulate our appetite for more goods. Consumer culture perpetuates itself precisely because it succeeds so well at failure!¹⁸⁸ The economic system assumes that sustained economic growth always adds value to individuals and society. Yet there is no evidence to suggest that once a basic level of need is met

¹⁸⁵ Dietrich Bonhoeffer, *Ethics* (New York: Simon & Schuster, 1995), 193.

¹⁸⁶ Gregory Bateson, *Steps to an ecology of mind: collected essays in anthropology, psychiatry, evolution, and epistemology* (Chicago: University of Chicago Press), 462.

¹⁸⁷ Simone Weil, *Oppression and liberty* (London: Routledge & Kegan Paul, 1958), 140.

¹⁸⁸ Grant McCracken, *Culture and consumption: new approaches to the symbolic character of consumer goods and activities*. (Bloomington: Indiana University Press. 1990), chapter 7.

and poverty has been escaped¹⁸⁹ there is any commensurate increase in human happiness and wellbeing. Indeed, social research seems to point in the opposite direction.¹⁹⁰

Economic activity assumes the ideal of independence; but independence often turns out to be a life sapping dependence: *'In the two decades leading to 1990, income from wages, on average doubled, while income from lending money multiplied sevenfold'*.¹⁹¹ Since 1990 the world economy has become more and more dependent upon debt as the driver of its growth, debt that has produced wealth for those in a position to lend.¹⁹² The consequences of such activity have spiralled with almost wholly negative effect.¹⁹³ What had the appearance of independence has become a burdensome reality of unhealthy dependence. Dependence upon an economic system that values growth rather than sustainability is a disincentive to reform which could restore healthy interdependence, the 'order' which exists at the heart of creation.

Creation Sabbath calls us to celebrate health and wellbeing with one another and with the nonhuman creation. Humans on the other hand preferentially choose to live outside that mutuality in the hope that it will produce greater abundance for self.

Urgent steps towards a healthy interdependence must be commenced. They could include:

- A remodelling of the GDP measure of productivity to include other indices such as volunteerism and care provided in the home. Most importantly, a valuing of depleted natural resources and of the damage caused by human

¹⁸⁹ 'A linen shirt for example is strictly speaking not a necessity of life ... but a creditable day labourer would be ashamed to appear in public without a linen shirt, the want of which would be supposed to denote that disgraceful degree of poverty which, it is presumed, nobody can fall into without extreme bad conduct': Adam Smith, *An inquiry into the nature and causes of the wealth of the nations* (New York: P.F. Collier, 1776 reprinted 1937), 821.

¹⁹⁰ Jackson, *Prosperity without growth: economics for a finite planet*, 145, figure 9.1.

¹⁹¹ Ulrich Duchrow, *Alternatives to global capitalism* (Utrecht: Utrecht International Books, 1995), 91.

¹⁹² Peter Selby, *Grace and mortgage: the language of faith and the debt of the world*. (London: Darton, Longman & Todd, 2009), 55.

¹⁹³ 'Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation. When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done': John Maynard Keynes, *The general theory of employment, interest and money* (London: Macmillan, 1936), 159.

activity to nonhuman creation. The latter will be contemplated in part through a mechanism that prices carbon.

- An annual assessment of social cohesion which measures and values human happiness and fulfilment, trust and contentment.
- Investment in renewable energy sources which enable a transition to a carbon neutral economy within the time frame required by scientific research.
- Transition to a stable state economy.

The insights of Creation Sabbath are that none of this will be possible without attention to the human vocation.¹⁹⁴

3.4 The crisis of the human vocation

The idea that there could be a common, shared, human vocation in relation to the order of creation does not sit easily in a post modern, post Enlightenment world that tacitly accepts the principle of human supremacy. In this context the 20th century philosopher/theologian Simone Weil speaks with profundity:

*God causes this world to exist but he consents not to command it, although he has the power to do so. Instead he leaves two other forces to rule in his place. On the one hand there is the blind necessity attaching to matter, including the psychic matter of the soul and on the other the autonomy essential to thinking persons ... By loving the order of this world we imitate the divine love which created this universe of which we are a part.*¹⁹⁵

Divine intelligence is the source of creation and the inspiration of its order. Humanity is not the source of the world's intelligence nor is it its sovereign. However the *rest* of God from creating is also the delegating of oversight or rule to humanity.¹⁹⁶ What that rule or authority might be we have already explored; it involves the imitation of God. Wenham writes: '[Genesis] chapter 1 reveals man's

¹⁹⁴ Jackson, *Prosperity without growth: economics for a finite planet*, 143.

¹⁹⁵ Simone Weil, *Waiting on God* (London: Routledge & Kegan Paul, 1951), 99.

¹⁹⁶ 'Thus when the creator ceases work on the seventh day, it is not the abdication of a petty deity from a burdensome task, as in some Mesopotamian creation accounts. Rather God's rest in Genesis 2 represents the delegation to humanity of the royal task of administering the world on his behalf., Humans are entrusted with nothing less than God's own proper work, as the creator's authorised representatives on earth. Whatever other meanings God's rest has elsewhere in the Old Testament (for example justification for the Sabbath as in Exodus 20:11), in the context of Genesis 1 creation story it appropriately symbolises the beginning of the rule of the human race, their coming into their true power as makers of history, as representatives and emissaries of God, called to shape the world in imitation of the creator's own primordial activity on the first six days of creation': Middleton, *The liberating image: the imago Dei in Genesis 1*, 212.

true nature. Man created in the divine image is expected to imitate God in his daily life.¹⁹⁷

Humanity has a dual role. Firstly, we are the embodiment of all that has preceded us in creation. The extraordinary insight of contemporary DNA science is not the level of commonality we share with those closest to us on the evolutionary tree, but the level of shared commonality with all living things, all who originate from the *adamah*. As Moltmann¹⁹⁸ says, we are *imago mundi* (image of the world): yet on the other hand we are *imago dei* (image of God) because we are called to represent all of life before God. Barker¹⁹⁹ picks up this theme in a chapter entitled *High Priests of Creation*, arguing that we are to intercede before God for the whole created order. As John the fourth Gospel writer was to reveal in his prologue (John 1:1ff), the incarnation is implicitly present in the creation narrative, for not only was the Divine Word the instrument of creation, but also that which is unfulfilled in humanity is fulfilled in the coming of the one who is perfectly *imago dei* and *imago mundi*.

Human beings are both of the earth and also apart from the earth as a result of the divine commission. This unique position endows humanity with the responsibility of being a member of the community of living things over which it is also to exercise care.²⁰⁰ Understanding and living with this challenge is an escalating problem in a world where 7 billion mouths need feeding. The pressure to feed those mouths at the expense of the creation is immense. Modern technology combined with an insatiable appetite for animate and inanimate resources has caused the human community to withdraw from a reciprocal relationship of care with the created order, to sit above it in a mode of exploitation. Ecological science increasingly warns us of the price that must be paid by such separation and yet the political willingness to begin the journey of reconnection is almost totally absent, as the December 2009 United Nations Climate Change Conference in Copenhagen so grimly testified.

¹⁹⁷ Wenham, *World Biblical commentary: Genesis 1-15*.

¹⁹⁸ Moltmann, *God in creation*, 190.

¹⁹⁹ Barker, *Creation: a biblical vision for the environment*, 193ff.

²⁰⁰ 'Not only should man know what he is making, but if possible he should see how it is used – see how nature is changed by him. Every man's work should be an object of contemplation for him': Simone Weil, *Formative writings, 1929-1941* (Amherst, University of Massachusetts Press, 1987), 155.

The reason why the price must ultimately be paid is that the ‘order’ of creation demands reciprocity. It is simply not possible for humanity to adopt for itself a role that is antithetical to the order in which it has been placed and avoid the consequences. Whether or not humanity will recognise the truth of its situation while there is still time only future history will reveal.

Sabbath, is the crown of the created order not humanity,²⁰¹ and yet to humanity is given the responsibility of care through its capacity to think. Humanity’s challenge is to own that place and honour its responsibilities. If it can, then the whole creation will enjoy the sustainability which Sabbath both celebrates and anticipates.

3.5 The crisis of inequality

The inequalities of life on the planet are unfortunately growing rather than declining. This can be illustrated by the relative wealth enjoyed by the fortunate compared with those who live in poverty; poverty often exacerbated by the burden climate change imposes upon them.²⁰² It can also be illustrated by the loss of many species due to human domination and the general decline of many habitats.²⁰³ As Albert Schweitzer argues, ethical behaviour is not simply limited to behaviour transacted between humans:

*A man is ethical only when life, as such is sacred to him, that of plants and animals as that of his fellow men, and when he devotes himself helpfully to all of life that needs help ... The ethic of relation man to man is not something apart by itself: it is only a particular relation that results from the universal one.*²⁰⁴

Birch argues the world depends upon three interrelated systems: the production system, the economic system and the ecological system.²⁰⁵ He observes that political leaders invariably ask about the health of the economic system but seldom about the health of the ecological system upon which it depends. He argues that because the economic system is propelled by the production system, producing is more important than the intrinsic or moral value of the product. We have found it easier to produce

²⁰¹ Moltmann, *God in creation*, 187.

²⁰² Northcott, *A moral climate: the ethics of global warming*, 55ff.

²⁰³ *ibid.*, 59ff.

²⁰⁴ Albert Schweitzer, *Out of my life and thought: an autobiography* (London: Allen & Unwin, 1933) 185.

²⁰⁵ Birch, *On purpose*, 154ff.

excessive and largely unneeded goods for the rich than to feed and house the poor. That profound ethical questions are raised by such a situation should be obvious to all.

As long as we perceive our values to be tied to what we acquire, redressing inequity and committing to sustainability will remain beyond our reach.

Brueggemann²⁰⁶ argues from Genesis 1:1-2:4, (echoed in Psalm 104), that Israel's vocation is to 'rest' in the generosity of God and be content. This is a great challenge to contemporary communities of faith whose lives are usually deemed to be indistinguishable from the standards and values of the world. Unnecessary acquisition, he argues, is a loss of humanity's true identity which deepens inequity and puts nonhuman creation at risk. If unbridled acquisition serves an economic system, rather than human fulfilment, a re-examination of the basis upon which economic systems are built is not a 'dangerous idea' but an obligation. This re-examination was a constant theme of Old Testament prophets who castigated Israel for the loss of their true identity through unattended inequity:

Alas for you who get evil gain for your houses setting your nest on high to be safe from the reach of harm! You have devised shame for your house by cutting off many peoples; you have fortified your life. The very stones will cry out from the wall, and the plaster will respond from the woodwork'. (Hab 2:9-11).

Scarcity and abundance, like goodness and evil, or love and hate, are two possibilities that constantly present themselves to humanity; and because of human activity present themselves also to nonhuman creation. To accept and respect the abundance of God is to live generously within limits. To choose the "myth of scarcity' is to create it, and be dominated by the need to hoard. Fear of scarcity breaks the bonds of human contentment, destroying interdependence and mutuality. To live within the contentedness of abundance is to enable it to flourish.

²⁰⁶ Walter Brueggemann, "The liturgy of abundance, the myth of scarcity," *Christian Century*, 24-31 March, <http://www.religion-online.org/showarticle.asp?title=533> (accessed 3 September 2010).

This point is well made by John Vincent Taylor in his much acclaimed *Enough is Enough*. In his chapter entitled ‘*The theology of enough*’,²⁰⁷ he argues that living within limits, being content with the abundant generosity of God, is to live the dream of *shalom*, what he calls the ‘*harmony of a caring community, informed at every point by its awareness of God*’.²⁰⁸ Richard Middleton makes a similar argument in a climactic chapter entitled *Imaging God’s Primal Generosity*.²⁰⁹ He argues that God begins filling the creation with abundance, but invites the life he has created, to continue that filling. Such filling is ‘fruitful’, he argues, inasmuch as it is complementary to all other life.

A refusal to accept limitation regardless of known and observable effect upon nonhuman creation is stubborn, selfish, and in the end self-destructive for humanity, which is itself an integral part of the total landscape which is under increasing threat.

Equity should emerge from an appreciation that abundance is the property or character of creation as a whole. When abundance is exploited for the benefit of an individual part of the creation, with no reciprocal return to the source from which it was drawn, its character is lost. Abundance is experienced in and through the complex web of relationships which make life possible. In the relatively short period of time that modern humanity has lived and evolved on the planet, the movement away from life lived in harmony with the created order towards a life that is lived independently of it has accelerated.

Localised inequality breeds resentment and alienation because of the imbalance of power that it produces. Inequality on a global scale, both between human beings and between humanity and nonhuman nature, threatens the very fabric of life itself.

²⁰⁷ John Vincent Taylor, *Enough is enough* (London: SCM Press, 1975), 40ff.

²⁰⁸ *ibid.*, 41.

²⁰⁹ Middleton, *The liberating image: the imago Dei in Genesis 1*, 21ff.

Chapter 4 Conclusion

The thesis has sought to bring the Christian theology of creation into a conversation with the global striving for sustainability, through the window of Creation Sabbath. It is said that a genuine conversation is an invitation for both parties to change.

a. Conversation partner 1 – Christianity

It is the conclusion of the thesis that the change required by the Christian Church, if it is to be a genuine partner in the conversation, goes right to its foundational orthodoxy. Is it possible for the Christian community to engage relevantly in this conversation from a theology of redemption alone? This thesis gives a resounding ‘no’ to the question, and yet the teaching and preaching of the Church generally gives priority to redemption, while creation theology remains a Cinderella.²¹⁰ There are several reasons why this matters.

It matters because the Bible begins in Genesis with creation and ends in the Book of Revelation with creation. While the Book of Revelation is about God’s final and global redemptive activity and the vanquishing of evil, it is set within a theology of creation. It matters, as has been argued, because creation theology informs redemption theology and redemption theology informs creation theology. As we have noted in the exegesis, only God can *bara* (create) and this activity is inclusive of both creation and redemption. Christian orthodoxy demands a life informed and lived out of both.

It matters, as has been argued, because creation theology gives identity to the individual parts of creation through their relationship with the whole. Redemption theology, in practice, focuses on the individual and their need to be right with God, it seldom extends that need for reconciliation beyond the human context. The thesis has noted the increasing prominence given to the individual since the Reformation and more particularly since the Enlightenment. The conservative arms of the Church, for whom redemption theology is the foundational tenet of belief, are often very critical of more liberal expressions of Church which are said to have adopted the ‘standards of the world’. Similar critique is seldom given to ‘conservatism’ that

²¹⁰ Williams, *On Christian theology*, 63.

seems to have uncritically absorbed the ideology of the Enlightenment and given theological respectability to it. It is ironic that the few voices that are engaged in a strong critique of human behaviour which contributes to potentially worrisome climate change outcomes are those that come from Churches that are otherwise accused of accepting the world's standards.

More research is required into the place that the individual has taken in Christian theology and why this has occurred. It is urgent that balance returns. Honouring diversity and difference (separation), which the creation narrative describes as 'good', is necessary; but of equal importance is the honouring of wholeness, or completeness, which the creation narrative describes as 'very good'.

It matters, as has been argued, because the primeval creation narrative, understood through the window of Creation Sabbath, has the capacity to form and inform humanity throughout history. It can provide a meta-narrative that gives flesh and form to scientific information and data. Science and religion can and should inform one another. Christianity that is not properly rooted in its own story not only does an injustice to itself, but also fails to enhance other disciplines in the common human quest for meaning and purpose.

It matters, as has been argued, because it is through the window of Creation Sabbath that we understand humanity to be both part of the world and apart from the world. We are part of the world inasmuch as our health and wellbeing are found in the health and wellbeing of the whole created order. We are apart from the world in that we have a responsibility of care for creation's order.

b. Conversation partner 2 – The issue of sustainability

It is the conclusion of the thesis that conversation with Christianity through the window of Creation Sabbath forces the quest for sustainability to be reframed beyond technical and scientific data to an examination of the heart and motivation of humanity. Is there such an entity as humanity's true nature? If there is, will its honouring contribute to the health of the nonhuman creation? Is it possible for the resource needs of global humanity to be met without further undermining the health of ecosystems?

It has been the argument of the thesis, through the window of Creation Sabbath, that the answer to these questions is ‘yes’. It is possible to speak of a common human vocation, of the place humanity is to assume (described above), both within creation and apart from it. As noted above, Einstein asked: ‘*is the world a safe place or not*’? The answer has far more to do with how humanity treats nonhuman creation than how the nonhuman creation impacts humanity.

It has been the argument of the thesis that the principle of ‘rest’ imbues creation, inclusive of humanity, with a way of being – a way of being which is relational, that seeks mutuality, that does not seek gain without reciprocity. The principle of ‘rest’ implies limits, limits which allow space for renewal and restoration.

These insights, it has been argued, not only expose environmental fragility and the threat that climate changes poses, but equally critique the manner in which human activity has been arranged through the prevailing economic system. It is argued that unregulated capitalism, capitalism that assumes the absolute priority of opportunity for individual gain at the expense of ‘common wealth’, not only puts the environment at risk, but also places human social order at considerable risk. Inequity creates an imbalance of power, which, if unattended, invites a violent correction.

The conversation with creation theology takes the quest for sustainability beyond data, beyond facts and figures to matters of profound moral choice. Given that humanity is imbedded in creation with all other forms of life is it morally acceptable for humanity to thrive, however temporally, at the expense of nonhuman diversity – this, as we have noted was Schweitzer’s question. Given that every human being is from the earth, is it morally right that those with the greatest opportunity have the right to exploit, while the poor have to carry more than an equal share of the price changed climatic conditions impose? And is it morally right that this generation should enjoy a standard of living which of necessity will require the next generation to meet the accrued environmental debt?

A conversation between the secular world and the community of faith, entered with appropriate respect and openness informs both and contributes to a more harmonious and just world for all.

Finally, Sabbath *the feast of creation*,²¹¹ is an eschatological hope. Just as Jesus speaks of the Kingdom as a reality which is inaugurated through his presence, and yet remains a future hope, so too Sabbath speaks not only of the order that God intends for creation but also of the hope that is yet to be fulfilled. Barker writes: '*Our present era is the sixth day, humans work together with the creator to complete creation*'.²¹² Moltmann states: '*The Sabbath opens creation for its future. On the Sabbath the redemption of the world is celebrated in anticipation.*'²¹³ Sabbath expresses the order God intends, and the fulfilment towards which we journey.

²¹¹ Moltmann, *God in creation*, 277.

²¹² Barker, *Creation: a biblical vision for the environment*, 225.

²¹³ Moltmann, *God in creation*, 286.

References

- Albertz, Rainer. 1994. *A history of the Israelite religion in the Old Testament period: vol 2. From the exile to the Maccabees*. Louisville: Westminster/John Knox Press.
- Bacon, Francis. 1859. *Novum organum: or, True suggestions for the interpretation of nature*, trans. Andrew Johnson. London: Bell & Daldy.
- Barker, Margaret. 2010. *Creation: a biblical vision for the environment*. London: T&T Clark International.
- Barth, Karl. 1966. *Dogmatics in outline*. London: SCM Press.
- Bateson, Gregory. 1972. *Steps to an ecology of mind: collected essays in anthropology, psychiatry, evolution, and epistemology*. Chicago: University of Chicago Press.
- Bedford-Strohm, Heinrich. 2007. 'Tilling and caring for the earth: public theology and ecology', *International journal of public theology*, vol.1, no.2, 230-248.
- Birch, Charles. 1990. *On purpose*. Sydney: New South Wales University Press.
- Blenkinsopp, Joseph. 1994. *Introduction to the Pentateuch*. In *New interpreter's Bible*. New York: Abingdon Press.
- Bonhoeffer, Dietrich. 1995. *Ethics*. New York: Simon & Schuster.
- Brueggemann, Walter. 1999. 'The liturgy of abundance, the myth of scarcity', *Christian Century*, 24-31 March, <http://www.religion-online.org/showarticle.asp?title=533> (accessed 3 September 2010).
- Brueggemann, Walter. 2006. *The word that redescribes the world: the Bible and discipleship*. Minneapolis: Fortress Press.
- Capon, Robert Farrar. 2003. *Genesis the movie*. Grand Rapids: William B. Eerdmans.
- Carson, Rachel. 2002. *Silent spring*. Boston: Houghton Mifflin.
- Cassuto, Umberto. 1961. *From Adam to Noah*. Jerusalem: Magnes Press The Hebrew University.
- Cox, Harvey. 1965. *The secular city: secularization and urbanization in theological perspective*. New York: Macmillan.
- Dawkins, Richard. 2006. *The God delusion*. London: Bantam Press.
- de Gruchy, Steve. 2009. *Oikos God and the olive agenda: theological reflections on economics and the environment*, <http://www.sacc.org.za/news07/oikos.html> (accessed 3 September 2010).

Diamond, Jared. 2005. *Collapse: how societies choose to fail or survive*. London: Allen Lane.

Dictionary of the Old Testament: Pentateuch. 2003. Illinois: InterVarsity Press.

Duchrow, Ulrich. 1998. *Alternatives to global capitalism*. Utrecht: International Books.

Earth Charter <http://www.earthcharterinaction.org/content/pages/Read-the-Charter.html> (accessed 16 October 2010).

Eldredge, Niles. *The sixth extinction*.
<http://www.actionbioscience.org/newfrontiers/eldredge2.html> (accessed 16 October 2010).

Eliot, T.S. 1959. *Four quartets*. London: Faber & Faber.

Environment and climate change (Christian Democratic Party policy statement)
<http://www.cdp.org.au/federal-policies/environment-and-climate.html> (accessed 15 October 2010).

Fishbane, Michael. 1998. *Biblical text and texture: a literary reading of selected texts*. Oxford: Oneworld.

Flannery, Tim. 2002. *The future eaters: an ecological history of the Australasian lands and people*. New York: Grove Press.

Flannery, Tim. 2006. *We are the weather makers: the story of global warming*. Melbourne: Text Publishing.

Flannery, Tim. 2010. *Here on Earth: an argument for hope*. Melbourne: Text Publishing.

For a future founded on solidarity and justice: a statement of the Evangelical Church in Germany and the German Bishops' on the Economic and Social Situation in Germany, 1997, <http://www.ekd.de/english/1729.html> (accessed 3 September 2010).

Fox, Matthew and Sheldrake, Rupert. 1996. *The physics of angels: exploring the realm where science and spirit meet*. San Francisco: Harper San Francisco.

Fretheim, Terence E. 1994. *Genesis*. In *New interpreter's Bible*. New York: Abingdon Press.

Garnaut, Ross. 2010. *Climate change, China booms and Australia's governance struggle in a changing world (Hamer oration, 5 August 2010)*,
<http://images.theage.com.au/file/2010/08/06/1754673/garnautspeech.pdf> (accessed 3 September 2010).

Gorshkov, Victor G, et al. 2000. *Biotic regulation of the environment. key issue of global change*. Chichester: Praxis.

- Granberg-Michaelson, Wesley. 1992. *Redeeming the Creation: the Rio Earth Summit: challenges for the churches*. Geneva: WCC Publications.
- Green, Stephen. 2009. *Good value: reflections on money, morality and an uncertain world*. London: Allen Lane.
- Hamilton, Clive. 2010. *Requiem for a species: why we resist the truth about climate change*. Crows Nest, NSW: Allen & Unwin.
- Hamilton, Victor P. 1990. *The book of Genesis, chapters 1-17*. Grand Rapids: William B. Eerdmans.
- Hansen, James. 2009. *Storms of my grandchildren: the truth about the coming climate catastrophe and our last chance to save humanity*. London: Bloomsbury.
- Hathaway, Mark and Boff, Leonardo. 2009. *The Tao of liberation*. New York: Orbis Press.
- Heidel, Alexander. 1951. *The Babylonian Genesis: the story of the creation*. Chicago: University of Chicago Press.
- Holy Bible: New Revised Standard Version*. 1989. London: Harper Collins.
- Into the world you love: encountering God in everyday life*. 2007. Adelaide: ATF Press.
- Interpreter's dictionary of the Bible*. 1962-1976. New York: Abingdon Press.
- Jackson, Tim. 2009. *Prosperity without growth: economics for a finite planet*. London: Earthscan.
- Jeeves, Malcolm. 2001. *The nature of persons and the emergence of kenotic behaviour* In *The work of love: creation as kenosis*, edited by John Polkinghorne. London: SPCK.
- Keynes, John Maynard. 1936. *The general theory of employment, interest and money*. London: Macmillan.
- Leibniz, Gottfried Wilhem. 1705, reprinted 1996. *New essays on human understanding*. Cambridge: Cambridge University Press.
- Leupold, HC. 1942. *Exposition of Genesis*. Columbus, Ohio: Wartburg.
- Limits to growth: a report for the Club of Rome's project on the predicament of mankind*. 1972. New York: Universe Books.
- Lorenz, Edward N. 1963. 'Deterministic nonperiodic flow', *Journal of the atmospheric sciences*, vol.20, no.2, 130-141.
- Lovelock, James. 2009. *The vanishing face of gaia; a final warning*. London: Allan Lane.

- Lowery, Richard H. 2000. *Sabbath and jubilee*. St Louis: Chalice Press.
- Malthus, Thomas. 1999. *An essay on the principles of population*. Oxford: Oxford University Press.
- Manning, Paddy. 2010. 'Zero carbon plan better than two zero credibility choices', *Sydney Morning Herald*, 24 July, <http://www.smh.com.au/business/zero-carbon-plan-better-than-two-zero-credibility-choices-20100723-10os6.html> (accessed 12 October 2010).
- Mattfeld, Walter R. 2001. *Israel's 'New moons and full moon observances' (originally 'Mesopotamian lunar memorials'?) and the shabbat (sabbath) = shapattu controversy*, <http://www.bibleorigins.net/ShabbatShapattu.html> (accessed 3 September 2010).
- McCracken, Grant. 1990. *Culture and consumption: new approaches to the symbolic character of consumer goods and activities*. Bloomington: Indiana University Press.
- McKay, Heather. 1994. *Sabbath and synagogue: the question of sabbath worship in ancient Judaism*. Leiden: Brill.
- Middleton, Richard. 2005. *The liberating image: the imago Dei in Genesis 1*. Grand Rapids, Brazos Press.
- Moltmann, Jürgen. 1967. *Theology of hope: on the ground and implications of a Christian eschatology*. London: SCM Press.
- Moltmann, Jürgen. 1984. *On human dignity: political theology and ethics*. Philadelphia: Fortress Press.
- Moltmann, Jürgen. 1985. *God in creation : an ecological doctrine of creation : the Gifford lectures 1984-1985*. London: SCM Press.
- Montefiore, Hugh. 1964. *Epistle to the Hebrews*. London: A&C Black.
- Montefiore, Hugh. 1969. *The question mark: the end of homo sapiens?* London: Collins.
- Most Americans tentative about origin-of-life explanations*, <http://www.gallup.com/poll/18748/Most-Americans-Tentative-About-OriginofLife-Explanations.aspx> (accessed 4 October 2010).
- New interpreter's dictionary of the Bible*. 2006-2009. Nashville, Tenn.: Abingdon Press.
- Northcott, Michael S. 2007. *A moral climate: the ethics of global warming*. London: Darton, Longman & Todd.
- Orsuto, Donna. 2006. *Holiness*. London: Continuum.
- Pearse, Guy. 2007. *High & dry: John Howard, climate change and the selling of Australia's future*. Camberwell, Vic: Penguin.

- Polkinghorne, John, ed. 2001. *The work of love: creation as kenosis*. Grand Rapids: William B Eerdmans.
- Primavesi, Anne. 1991. *From Apocalypse to Genesis: ecology, feminism and Christianity*. London: Burns & Oates.
- Rad, Gerhard von. 1972. *Genesis: a commentary*. London: SCM Press.
- Robinson, Gnana. 1988. *The origin and development of the Old Testament Sabbath : a comprehensive exegetical approach*. Peter Lang: Frankfurt am Main.
- Rolston, Holmes. 2001. *Kenosis and nature* In *The work of love: creation as kenosis*, edited by John Polkinghorne. London: SPCK.
- Rudd, Kevin. 2009. *Address to the 64th session of the United Nations General Assembly 23 September 2009*, <http://www.smh.com.au/opinion/politics/rudd-speech-to-the-united-nations-20090924-g3nn.html> (accessed 3 September 2010).
- Sachs, Jeffrey. 2008. *Common wealth: economics for a crowded planet*. London: Allen Lane.
- Sanders, James A. 1987. *From sacred story to sacred text: canon as paradigm*. Philadelphia: Fortress Press.
- Sarna, Nahum N. 1989. *Genesis*. Philadelphia: Jewish Publication Society.
- Schweitzer, Albert. 1933. *Out of my life & thought: an autobiography*. London: Allen & Unwin.
- Selby, Peter. 1997. *Grace and mortgage: the language of faith and the debt of the world*. London: Darton, Longman & Todd.
- Smith, Adam. 1776, reprinted 1937. *An inquiry into the nature and causes of the wealth of nations*. New York: P.F.Collier.
- Steck, Odil Hannes. 1975. *Der Schöpfungsbericht der Priesterschrift: Studien zur literarkritischen und überlieferungsgeschichtlichen Problematik von Genesis 1,1-2,4a, rev.ed.* Göttingen: Vandenhoeck and Ruprecht.
- Sunday profile: Lord Martin Rees eminent British scientist* 2010, radio program, ABC Radio, 26 March, <http://www.abc.net.au/rn/sundayprofile/stories/2010/2857425.htm> (accessed 3 September 2010).
- Taylor, John Vincent. 1975. *Enough is enough*. London: SCM Press.
- Teilhard De Chardin, Pierre. 1965. *The phenomenon of man*. London: Fontana.
- Theological dictionary of the Old Testament*. 1995. Grand Rapids: William B Eerdmans.

- VanGemeren, Willem A, ed. 1997 *New international dictionary of Old Testament theology and exegesis*. Grand Rapids: Zondervan Publishing House.
- Vanstone, WH. 1982. *The stature of waiting*. London: Darton, Longman & Todd.
- Vanstone, WH. 1997. *Love's endeavour, love's expense: the response of being to the love of God*. London: Darton, Longman and Todd.
- Velde, Rudi A te. 2006. *Aquinas on God: The 'Divine Science' of the Summa Theologiae*. Burlington: Ashgate Publishing.
- Weil, Simone. 1951. *Waiting on God*. London: Routledge & Kegan Paul.
- Weil, Simone. 1958. *Oppression and liberty*. London: Routledge & Kegan Paul.
- Weil, Simone. 1987. *Formative writings, 1929-1941*. Amherst: University of Massachusetts Press.
- Wenham, Gordon J. 1987. *Word Biblical Commentary: Genesis 1-15*. Waco, Texas: Word Books.
- Westerman, Claus. 1984. *Genesis 1-11: a commentary*. London: SPCK.
- Williams, Rowan. 2000. *On Christian theology*. Oxford: Blackwell.
- Williams, Rowan. 2009. *Renewing the face of the earth: human responsibility and the environment*. (Ebor lecture, York Minister, 25 March 2009), <http://www.archbishopofcanterbury.org/2351?q=ebor> (accessed 3 September 2010).
- Williams, Rowan. 2009. *Sermon, Copenhagen Cathedral*, 13 December, <http://www.archbishopofcanterbury.org/2728> (accessed 3 September 2010).
- World charter for nature*. 1982, <http://www.unep.org/law/PDF/UNEPEnv-LawGuide&PrincN05.pdf> (accessed 3 September 2010).
- World footprint: do we fit on the planet?*, http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/ (accessed 4 October 2010).
- World population to reach 9.1 billion in 2050, UN projects*. 2005, <http://www.un.org/apps/news/story.asp?NewsID=13451&Cr=population&Cr1=&Kw1=population&Kw2=&Kw3=> (accessed 3 September 2010).