

GRAHAM J. O'BRIEN

A Theology of Purpose: Creation, Evolution and the Understanding of Purpose

The notion of purpose within the universe remains one of the central areas of disagreement between theology and science today. Even within theology itself, there is the belief that purpose is a religious inference rather than a biological reality. Recently, however, Simon Conway Morris has countered common evolutionary opinion by suggesting that the biological process of evolution does appear to be purposeful, as illustrated by the fact of convergence. Although this concept is controversial, it has some theological merit, because if evolution as a process can now be considered purposeful, a theology of purpose can be developed. By using the doctrine of election as outlined by Karl Barth, I believe such a theology can be derived through which the purpose for evolution can be seen in producing the 'inevitable humans'. In this context, a theology of purpose acts to support the dialogue between theology and science, and provides a basis for an ethic of care.

Key Words: theology, creation, evolution, purpose, Karl Barth, election, Simon Conway Morris, convergence.

Introduction

For theology to be relevant within our society it must be able to dialogue with, and 'integrate' the developments of science, and 'only if it is so integrated will the contribution of theology to the general understanding of human life be available for general society and acknowledged by that society'.¹ Even though theology and science both share the belief that the world is 'characterized by regularity and intelligibility',² one of the central differences is their understanding of 'purpose' within the universe. Purpose means the 'realising of value', so that for the universe to be purposeful suggests that it is 'orientated towards the implementation of something intrinsically good'.³ A religious world-view affirms the purposefulness of the natural world;⁴ however, this

1 Hefner, P. *The Human Factor: Evolution, Culture, and Religion*, Minneapolis: Fortress Press (1993), pp. 219-220.

2 McGrath, A. E. *Nature*, vol. 1, *A Scientific Theology*, 3 vols., Edinburgh: T&T Clark Ltd (2001), p. 218.

3 Haight, J. F. *Deeper Than Darwin: The Prospect for Religion in the Age of Evolution*, Oxford: Westview Press (2003), p. 186.

4 *ibid.*, p. 185.

position has been challenged by science – especially evolutionary biology. Along with the advent of modern genetics, some scientists have developed a philosophical view that life has no direction, that there is no purpose to the universe, and that matter is “all there is”.⁵ In this context, the term ‘teleonomy’ is used to imply that purpose is only apparent and is the result of chance in natural selection.⁶

In contrast, the Christian tradition affirms that God’s creation is purposeful (teleology), leading to communion with God and realised fully in the ‘new creation’ of the eschaton. This view places evolutionary history within the broader story of God’s creative and redeeming work, although there are many different interpretations and implications of God’s purposes for creation. One such position is that of Ted Peters and Martinez Hewlett who propose that ‘nature’s purpose is not inherent within nature itself...its value or direction belongs to the relationship of nature with God’.⁷ Recently, however, biologist Simon Conway Morris has suggested that purpose can be seen in the biological material of creation through the process of evolutionary ‘convergence’, resulting in the inevitable evolution of a fully sentient being.⁸ Placing this view within theistic evolution would affirm that evolution is purposeful, leading to the generation of the creature who can relate not only to creation, but also to the Creator.

The intent of this article is threefold. First, this essay aims to support the understanding of Conway Morris by proposing a ‘theology of purpose’. Contrasting the Christian doctrine of creation and the scientific view of evolution enables us to explore the connections that Conway Morris suggests. Secondly, in proposing a theology of purpose, I have drawn on Karl Barth, one of the most influential theologians of the twentieth century⁹ whose systematic theology, including his theology of creation, is still relevant to the theology/science debate today. One of Barth’s most significant contributions to theology is his doctrine of election. Although Barth himself did not engage in ‘natural theology’,¹⁰ I am suggesting that by developing the doctrine of election it is possible

5 *ibid.*, p. 7. Here John Haught quotes Stephen Jay Gould.

6 Peters, T. & Hewlett, M. *Evolution, from Creation to New Creation: Conflict, Conversation, and Convergence*, Nashville: Abingdon Press (2003), p. 49. Teleonomy is defined as ‘the quality of apparent purposefulness in living organisms that derives from their evolutionary adaptation’.

7 *ibid.*, pp. 28, 159 & 163. This view is termed ‘Theistic Evolution’. For a survey of ‘Theistic Evolutionists’ see pp. 115-181.

8 Conway Morris, S. *Life’s Solution: Inevitable Humans in a Lonely Universe*, Cambridge: Cambridge University Press (2003), pp. 313 & 328. This view contrasts with that of current scientific understanding.

9 Webster, J. ‘Introducing Barth’, In Webster, J. (ed.) *The Cambridge Companion to Karl Barth*, Cambridge: Cambridge University Press (2000), p. 1.

10 Karl Barth’s objection to the notion of natural theology must be viewed in the context of his objection to Enlightenment theology. As T.F. Torrance suggests, Barth did sanction natural theology as a subordinate aspect of revealed theology. Furthermore, Torrance outlined a methodology for natural theology within a Trinitarian context, linked with both revelation and salvation through Christ. See McGrath, A.E. *op.cit.*, (2) pp. 136-137, 268-285 & 294-295.

to infer that one of creation's purposes is to produce the creature whom God has elected, without denigrating the value of creation as a whole. I believe this insight provides a compatible theological understanding for the suggestion of Conway Morris that the biology of nature shows purposefulness. Finally, a theology of purpose has ethical implications in which interconnection/integrity forms the central understanding.

Creation and Evolution: a contrasting view of purpose

The Christian understanding of creation is centred on the Judeo-Christian belief that God is the 'Creator',¹¹ and humankind is seen as the climax of God's creative activity, as the only creature made in the image of God.¹² The emphasis of the Christian doctrine of creation is that the world was created out of divine intention so that the entire cosmos owes its existence and purpose to God, with creation existing in the context of God's purposes¹³ yet distinct from Godself.¹⁴ The 'supreme end' for which God has acted as Creator is the 'purpose of his Holy love', by which God wills to bring a creaturely realm of heaven and earth into existence. Within this realm, God's glory is reflected and God chooses to share with the creature the communion of love which is the Trinity, through a covenantal framework of grace.¹⁵ As Barth comments, 'The purpose and therefore the meaning of creation is to make possible the history of God's covenant with humanity'.¹⁶ This covenantal relationship implies a purposed and unequal coexistence between God and the world, in which the world relies upon God for its existence.¹⁷ Creation is therefore dependent on God as its source, a view expressed in the understanding of *creatio continua* where creation moves towards its eschatological completion and is judged 'very good'.¹⁸ As Torrance suggests, in sustaining the creation God is revealed as 'personal' because, 'he loves it, upholds it and blesses it and coordinates its continuing creaturely existence with his own ever-living uncreated existence, as the one Source of all being and order, all existence and rationality'.¹⁹

11 Barth, K. *Dogmatics in Outline*, London: SCM Press (2001), p. 41.

12 McGrath, A.E. *Christian Theology: An Introduction*, 3 ed., Oxford: Blackwell Publishers (2001), p. 440; Curtis, E.M. 'Image of God (OT)', In Freeman, D.N. et al., (eds.) *The Anchor Bible Dictionary*, Vol. 3, 6 vols., New York: Doubleday (1992), pp. 389-391 (p. 390). The central biblical text is Gen. 1:26-27.

13 Hefner, P. *op.cit.*, (1) p. 46; McGrath, A.E. *op.cit.*, (2) p. 181.

14 Barth, K. *op.cit.*, (11) p. 43.

15 Torrance, T.F. *The Christian Doctrine of God, One Being, Three Persons*, Edinburgh: T&T Clark Ltd (2001), pp. 218-219.

16 Karl Barth as quoted in McGrath, A.E. *op. cit.*, (2) p. 179.

17 Torrance, T.F. *op.cit.*, (15) p. 223.

18 Peters, T. & Hewlett, M. *op. cit.*, (6) pp. 158-161. Peters and Hewlett do not however see creation as a once-for-all event but as an ongoing process where divine activity provides the world with an open future.

19 Torrance, T.F. *op. cit.*, (15) pp. 211-212. Hefner suggests God 'is faithful to the creation that has come into being by God's own intention'. See Hefner, *op. cit.*, (1) p. 43.

The notion of a 'continuing creation' does not deny the goodness of God's creative act, but highlights the fact that creation is to become something else perfected in and through Christ as a 'new creation'. In this future, God's providence sustains the world in a process where creation can be seen as 'God's project', which is reorientated to its 'proper end' through the resurrection of Jesus.²⁰ God therefore ensures that the world continues over time, and directs the world for a loving purpose.²¹ This highlights the eschatological perspective of providence which Gunton describes as 'conservation in eschatological perspective', where the purposes of the Creator are realised in advance by creation (including humanity) becoming that which it was made to be.²²

Another aspect of the world's reliance on God is the orderly nature of creation, which is explored and described by the natural sciences, and is understood theologically to result from God's character (rationality) in the act of creation.²³ As a result, McGrath suggests that the divine rationality is 'embedded in creation and embodied in Christ', and it is this rationality which humanity as the *imago Dei* can perceive.²⁴ Within God's purpose for creation is freedom – the time and space to become itself – through what Karl Barth describes as 'God's patience'.²⁵ Therefore, the act of creation can be seen to have two purposes: to create something that is intrinsically of value, and to make something valuable in itself because it is created to serve God's glory.²⁶ For humanity, freedom is a 'relational concept'²⁷ that is limited by the existence of fellow creatures and the sovereignty of God. As a result, human freedom is 'an imperfect mirroring of the divine freedom', and is ultimately freedom to decide for God in obedience.²⁸

In contrast to the Christian understanding, a secularised interpretation of evolution highlights a very different view of purpose, in which the evolutionary process is 'at its core, directionless and purposeless'.²⁹ According to this view,

20 Gunton, C. E. *The Christian Faith: An Introduction to Christian Doctrine*, Oxford: Blackwell Publishing (2002), pp. 7 & 19.

21 Tanner, K. 'Creation and providence', In Webster, J. (ed.) *The Cambridge Companion to Karl Barth*, Cambridge: Cambridge University Press (2000), pp. 111-126 (p. 122).

22 Gunton, C.E. *op. cit.*, (20) p. 36.

23 McGrath, A.E. *op. cit.*, (2) pp. 220-233. As McGrath suggest, this could have been another way.

24 *ibid.*, 188 & 196. McGrath notes that this idea comes from John Polkinghorne.

25 Karl Barth as quoted in Gunton, C.E. *op. cit.*, (20) p. 6. In a similar manner John Haught talks of creation as 'truly other' than God, where nature's contingencies and evolution's randomness show God's caring and waiting for the 'other' to appear. See Haught, J. *op. cit.*, (3) p. 80.

26 Gunton, C.E. *op. cit.*, (20) p. 19.

27 *ibid.*, p. 45.

28 Barth, K. *op. cit.*, (11) p. 47.

29 Peters, T. & Hewlett, M. *op. cit.*, (6) p. 49. Daniel Dennett calls evolution 'a mindless, purposeless process'. As quoted in Barbour, I. G. *When Science Meets Religion: Enemies, Strangers or Partners?*, San Francisco: HarperSanFrancisco (2000), p. 95.

chance is the antithesis of any notion of God's divine providence and design,³⁰ having its roots in Darwin's response to the mechanistic theology of creation of the day typified by William Paley.³¹ For Darwin, descent by modification driven by natural selection offered a 'scientifically testable explanation for the same observed world that Paley considers'. Therefore, as a process that maintained adaptation, natural selection gave the appearance of design.³² Today, neo-Darwinism (synthetic theory of evolution) combines natural selection, Mendelian genetics and molecular biology to provide a mechanism of action and an understanding of gradual change within Darwin's original theory.³³ This view stresses the opportunistic nature of natural selection, whereby 'variations arise by chance and are selected in accordance with the demands of the environment'.³⁴ Chance (contingency)³⁵ is needed to produce random variation through mutations, and then natural selection (necessity) results in the selection of those variations that produce adaptations relevant to reproductive success in a given environment. This overall process results in the non-random selection of randomly occurring events, where natural selection acts like a filter which retains the useful chance variations.³⁶ Natural selection thereby preserves novelty by increasing the probability that improbable genetic events will be inherited.³⁷

At issue here, however, is not the science of evolution, but rather evolutionism, the merging of evolutionary science with metaphysical naturalism, an atheistic position whereby 'creation' has occurred by purely natural processes.

30 Haight, J.F. 'Does evolution rule out God's existence?' In Miller J.B. (ed.) *An Evolving Dialogue: Theological and Scientific Perspectives on Evolution*, Harrisburg: Trinity Press International (2001), pp. 339-351 (p. 340). This issue has caused considerable debate over the teaching of evolution in American schools. As a result, theologians Huston Smith and Alvin Plantinga managed to persuade the National Association of Biology Teachers to remove 'unsupervised' and 'impersonal' from its official description of evolution, because it implied the non-existence of God. See Religion News Service, 'Evolution Statement Altered', *Christian Century* (1997) November 12: 1029.

31 McGrath, A.E. *Science and Religion: An Introduction*, Oxford: Blackwell Publishing (1998), pp. 99-102; Roger, J. 'The mechanistic conception of life', In Lindberg D.C. & Numbers R.L. (eds.) *God and Nature: Historical Essay on the Encounter between Christianity and Science*, Berkeley: University of California Press (1986), pp. 227-295 (p. 283).

32 Peters, T. & Hewlett, M. *op. cit.*, (6) p. 42; Ayala, F.J. 'Biological evolution: an introduction', In Miller J.B.(ed.) *An Evolving Dialogue: Theological and Scientific Perspectives on Evolution*, Harrisburg: Trinity Press International (2001), pp. 9-52 (p. 13).

33 Ayala, F.J. *op. cit.*, (32) pp.15-17. Also see Peters, T. & Hewlett, M. *op. cit.*, (6) pp. 45-46.

34 Stebbins, G. Ledyard & Ayala, F.J. 'The Evolution of Darwinism', In Miller J.B. *An Evolving Dialogue: Theological and Scientific Perspectives on Evolution*, Harrisburg: Trinity Press International (2001), pp. 181-195 (p. 181).

35 Simon Conway Morris defines contingency as 'historical accident'. See Conway Morris, S. *op. cit.*, (8) p. 297.

36 Ayala, F.J. 'Chance and necessity: adaptation and novelty in evolution', In Miller J.B. (ed.) *An Evolving Dialogue: Theological and Scientific Perspectives on Evolution*, Harrisburg: Trinity Press International (2001), pp. 231-261 (p. 231); Ridley, M. 'The Mechanism of Evolution', In Miller J.B.(ed.) *An Evolving Dialogue: Theological and Scientific Perspectives on Evolution*, Harrisburg: Trinity Press International (2001), pp. 53-65 (p. 58).

37 Ayala, F.J. 'Intelligent design: the original version', *Theology and Science* (2003) 1(1), 9-32 (pp. 19-24).

Therefore *a priori*, this metascientific position denies the existence of God and notions of ultimate purpose. Alvin Plantinga has objected to this evolutionary naturalism based on the commonly held perception that our cognitive faculties have evolved to provide true beliefs. On the contrary, Plantinga (*via* Darwin and Churchland) suggests that the arrival of cognitive faculties by means of evolution implies that their primary role is survival (behaviour) not the production of true beliefs. Therefore, given biological evolution, the probability that our faculties are reliable would be low because their purpose is survival. Taken further, accepting metaphysical naturalism and the evolution of human cognitive faculties produces a defeater for our belief in reliable cognitive faculties and therefore a defeater for naturalism, which itself is a belief. As a result the 'conjunction of naturalism with evolutionary theory is self defeating... it is therefore unacceptable and irrational'.³⁸ The significance of this position can be identified in the view of John Green who suggests that 'science becomes pointless and even destructive unless it takes on significance and direction from a religious affirmation concerning meaning and value of human existence'.³⁹ So the question remains, can 'purpose' be reinstated within an evolutionary framework?

A Purposeful Process: Simon Conway Morris

The discussion so far has highlighted the contrast between the theological and the neo-Darwinian understandings of purpose. However, even among scientists, the view that evolution is purposeless and relies solely on chance in some ultimate sense is by no means shared by all. Although affirming neo-Darwinian evolution as a process, Simon Conway Morris has suggested that evolution displays three features that enable the evolutionary process to be viewed at a deeper level. These levels of 'depth' are congruent with an understanding of creation and thereby provide an opening for an integrated theological and biological view of evolution.⁴⁰

First, evolution is constrained, so that the physical constraints limit the possible biological outcomes.⁴¹ Rather than relying on novelty per se, evolution utilises the 'tried and trusted building blocks of organic architecture', using the principle of 'inherency', where the molecules essential for existence are already in place at an earlier stage in the history of life. The result is that emergence relies on co-option and redeployment rather than invention.⁴² For Conway Mor-

38 Plantinga, A. 'Naturalism Defeated', 1994 (cited April 26 2006) http://www.calvin.edu/academic/philosophy/virtual_library/articles/plantinga_alvin/naturalism_defeated.pdf

39 John Greene as quoted in Conway Morris, S. *op. cit.*, (8) p. 325.

40 *ibid.*, pp. 5 & 329. Conway Morris emphasises these features: the underlying simplicity; navigation towards the biological solutions within a vast number of possibilities; sensitivity; inherency – rearrangement and co-option; biological diversity and convergence; inevitability of sentience.

41 *ibid.*, pp. 11,12 106 & 298. One example is the specificity of amino acids. Life as we know it uses only 20 amino acids, all of the L-isomeric form. See p.40.

42 *ibid.*, pp. 8, 166, 234-235 and 238. Co-option is defined as the redeployment of existing structures and putting them together in sometimes unique ways.

ris it is clear that evolutionary adaptation is ubiquitous, the constraints of life leading to the inevitable result – evolutionary convergence, where the same biological solutions are reached in order for life to continue. Evolutionary convergence is defined as the ‘recurrent tendency of biological organization to arrive at the same “solution” to a particular need’, of which Conway Morris provides many examples. Convergence not only confirms evolutionary adaptation in this view, but also provides the ‘motor’ for evolution, so that the emergence of the various biological properties is very probable, if not inevitable.⁴³ In contrast to evolutionary orthodoxy where every evolutionary possibility has an equal chance of being explored, convergence indicates that the number of biological possibilities is dramatically restricted. The bulk of biological ‘hyperspace’ therefore can never be explored; instead evolution is channelled to ‘stable nodes of functionality’.⁴⁴

Secondly, evolution shows trends, and in particular the trend of increasing complexity. As a result, natural selection can not be a ‘random walk through genetic drift’.⁴⁵ According to Conway Morris, geological time shows the emergence of more complex worlds. One such trend is the increase in body size of terrestrial mammals which he suggests ‘sounds like progress’.⁴⁶ Increasing complexity has also been noted by Pierre Teilhard de Chardin, who suggested that in proportion to physical complexity, there has been an increase in ‘consciousness’ giving rise to the ‘law of complexity consciousness’. Here the increasing complexity of matter’s organisation results in the emergence of consciousness and eventually self-awareness.⁴⁷

Thirdly, an understanding of convergence points to deeper patterns in evolution, which Conway Morris identifies as ‘genuine creation’.⁴⁸ Here the paradox exists between the vast richness of life and the constraints of life, as seen in the growing list of molecules that have undergone convergent evolution.⁴⁹ The metaphor of evolutionary ‘navigation’ provides an informative concept for understanding convergence, where life has the propensity to navigate to rather precise solutions in response to adaptive challenges, thus allowing evolution to move across the ‘multidimensional hyperspace’ of biological possibility to the specific biological solutions.⁵⁰ Evolution is therefore seeded with ‘probabilities

43 *ibid.*, pp. xii, 125, 283 & 302-303.

44 *ibid.*, pp. 127-128, 145-146 & 309. ‘Hyperspace’ refers to the seemingly unlimited number of possible combinations accessible for use in biological solutions.

45 *ibid.*, pp. 21 & 132.

46 *ibid.*, pp. 304-307. Quotation p.307.

47 Pierre Teilhard de Chardin as outline in Haught. J.F. *op. cit.*, (3) p. 162-163.

48 Conway Morris, S. *op. cit.*, (8) pp. 20 & 290.

49 *ibid.*, p. 295.

50 *ibid.*, pp. 308-310. It is interesting to note that Alister McGrath is also going to be using a model based on ‘a ship at sea’ in his development of Christian doctrine. See McGrath, A.E. *The Science of God: An Introduction to Scientific Theology*, Grand Rapids: William B Eerdmans Publishing Company (2004), pp. 228-230.

if not inevitabilities⁵¹ in which the entire 'foundational economy' of the universe must be just right in order for life to develop.⁵²

Therefore, as Conway Morris suggests, this is a world underpinned by deeper commonalities than might first be apparent.⁵³ A parallel understanding of 'depth' can be found in the work of theologian John Haught. In his view, the universe may be thought of in-depth as a story filled with 'promise', where the promise of life and evolution was present at the 'cosmic dawn'.⁵⁴ Haught produces a metaphysics of promise where 'a promising God who opens up the world to the future is the ultimate explanation of evolution'. Evolution therefore is both 'adaptation and anticipation', as God awaits the world in this unfinished universe. The fundamental meaning of the evolving universe therefore is found in the carrying of a promise.⁵⁵

The unique implication from Simon Conway Morris' work is that, because evolution has produced a uniquely sentient species (humanity) with a sense of purpose, we must take the claim of theology seriously: the world does have meaning.⁵⁶ This position counters the naturalist's interpretation of evolution in which the process is devoid of ultimate purpose.⁵⁷ The position of Simon Conway Morris is also distinct from that of other theistic evolutionists, in that he attempts to provide a biological basis for seeing purpose through contingency. In contrast, Ted Peters and Martinez Hewlett propose that nature is devoid of inherent purpose, suggesting that purpose is assigned to it by God. Purpose is therefore, in this view, discerned eschatologically, where God's redemptive act defines what the previous creation will have meant.⁵⁸ Similarly, Philip Hefner suggests that it is 'certainly not possible to assert a teleology for nature, except as an item of faith'. Again, the eschatological perspective suggests that God's purposes include creation, acknowledging its creator and freely fulfilling the creator's will.⁵⁹ Peters, Martinez and Hefner emphasise teleonomy not teleology by placing evolutionary history in the context of God's creative and redeeming work.⁶⁰ Therefore no purpose can be discerned within the bounds of scientific methodology, a position undermined by the work of Simon Conway Morris, in which convergence and directionality act as pointers to a sense of

51 Conway Morris, *S. op. cit.*, (8) p. 298.

52 Howard Van Till as quoted in *ibid.*, p. 327.

53 *ibid.*, p. 303.

54 Haught, J.F. *op. cit.*, (3) pp. 53 & 63.

55 *ibid.*, pp. 128 & 142-144. Here John Haught draws on Moltmann who suggests that waiting is the highest form of interest in the other.

56 Conway Morris, *S. op. cit.*, (8) p. 328.

57 Peters, T. & Hewlett, M. *op. cit.*, (6) pp. 26 & 48-49.

58 *ibid.*, pp. 159-160.

59 Hefner, P. *op. cit.*, (1) pp. 39 & 43-44. Here Hefner uses 'teleology' as referring to 'preprogrammed goals that can be extrapolated from the original programming'. Also 'The term *eschatological* affirms that God is able to provide new possibilities and new futures without destroying the life giving continuities with our origins'. See p.47.

60 Peters, T. & Hewlett, M. *op. cit.*, (6) pp. 163 & 167. For a definition of teleonomy see (6).

meaning and purpose to the evolutionary process which is endogenous to the process itself.

A further feature of Peters and Hewlett is their belief that all possible paths must be available for creation.⁶¹ However, as Conway Morris suggests 'not only is the universe strangely fit to purpose, but so too... is life's ability to navigate to its solutions'. All the possible biological paths are not open to be explored, in fact the constraints of life lead to the probable if not the inevitable emergence of various biological properties.⁶²

So can we identify God's purposes within the biological matrix? I believe we can through a theology of purpose in which the eternal intentions of God are brought to actuality within the biological process. Therefore we can move away from teleonomy as 'perceived purposefulness' in the evolutionary process, to teleology as biologically expressed purpose in creation, in which science accepts different levels of non-reductionist evolutionary understanding. This provides a true sense of an 'evolving creation'⁶³ in which theology and biology not only co-exist, but also mutually enhance each other's narratives.

A Theology of Purpose

At the beginning of this article, the importance of theology's ability to integrate aspects of scientific understanding in order to be relevant to contemporary society was highlighted. The concept of purpose is one area where theology and science often provide differing accounts, especially in relation to the understanding of evolution. As the previous section suggests, there are deeper levels within the metascientific understanding of evolution into which theology can speak. I suggest that one of these 'deeper levels' relates to the notion of purpose. In particular I would suggest that Karl Barth's doctrine of election has significant explanatory power in terms of understanding God's purposes in creation. Significantly, the reading of purpose into evolution as suggested by Conway Morris's explanation of convergence provides a scientific account that is compatible with the biological outworking of God's eternal purposes in creation, as previously determined by God's eternal election. Election, therefore, does not rule out contingent events, such as the specific events that generate genetic diversity, as being excluded from God's eternal purpose, but points to a deeper understanding of these biological processes.

61 *ibid.*, 167.

62 Conway Morris, S. *op. cit.*, (8) pp. 283 & 327. Quotation p.327.

63 Van Till, H.J. 'Basil, Augustine, and the doctrine of creation's functional integrity', *Science and Christian Belief* (1996) 8(1), 21-38 (pp. 34-36).

Election and God

The unifying concept of Karl Barth's theology is based on God's salvific action.⁶⁴ Within God's saving action, the doctrine of election provides a 'hermeneutical rule' that allows talk about 'what God was doing and who and what God was/is – "before the foundation of the world"'.⁶⁵ For this reason I believe the doctrine of election can be a tool in developing an integrated theology of purpose. For Barth, the primary statement about God is that God is 'the electing God', where election is understood as what God does in, with and to Godself, in order that God's grace can be shown to be what God is not.⁶⁶ It is God's 'primal decision' of 'self-ordination' where God is eternally complete within the triune life and in an act of divine freedom determines to be the 'covenant-God' in an act of loving grace to humanity.⁶⁷

In this Trinitarian view, Jesus Christ is understood as the electing God and the elected human, both the subject and the object of election.⁶⁸ As the subject of election, God's very being is defined by what Godself is revealed to be in Jesus Christ. As the object of election, God's covenantal relation was established in God's eternal act of self-determination, as a relation with the man Jesus and with others and the world 'in Him'.⁶⁹ Therefore humanity is chosen as the covenant partner in whom the Son should be one person with the man Jesus, humanity's representative, and the reality of our human response to God as the image of real humanity in free obedience to God.⁷⁰ The role of the Holy Spirit in this framework is located in God's freedom to love as the bond of fellowship between the Father and the Son and active in the transformation of the world to unite creation with God.⁷¹ It is therefore through Christ and in the

64 Gunton, C.E. 'Salvation', In Webster, J. (ed.) *The Cambridge Companion to Karl Barth*, Cambridge: Cambridge University Press (2000), pp. 143-158 (p. 143).

65 McCormack, B. 'Grace and being: the role of God's gracious election in Karl Barth's theological ontology', In Webster, J. (ed.) *The Cambridge Companion to Karl Barth*, Cambridge: Cambridge University Press (2000), pp. 92-110 (p. 92).

66 Gunton, C.E. 'Karl Barth's doctrine of election as part of his doctrine of God', *Journal of Theological Studies* (1974) 25(October), 381-392 (pp. 383-384 & 390); Barth, K. *The Doctrine of God*, Vol. II/2 *Church Dogmatics*, 13 vols., Bromiley G.W. & Torrance, T.F. (ed.), Edinburgh: T & T Clark (1957), p. 76. In this definition God is the gracious God, the 'One who is God in the beginning'. See p.93.

67 Barth, K. *op. cit.*, (66) pp. 11, 89 & 168; Torrance, A. 'The Trinity', In Webster, J. (ed.) *The Cambridge Companion to Karl Barth*, Cambridge: Cambridge University Press (2000), pp. 72-91 (pp. 86-88).

68 Barth, K. *op. cit.*, (66) p. 3; McCormack, B. *op. cit.*, (65) pp. 97 & 105; Fiddes, P.S. 'The atonement and the Trinity', In Heron, A.I.C. (ed.) *The Forgotten Trinity: A Selection of Papers Presented on the BCC Study Commission on the Trinitarian Doctrine Today*, London: Council of Churches for Britain and Ireland and the British Council of Churches (1991), pp. 103-122 (p. 110).

69 McCormack, B. *op. cit.*, (65) pp. 97, 100 & 105; Barth, K. *op. cit.*, (66) p. 26. Barth's view is based on John 3: 16 as the active demonstration of God's will for fellowship.

70 Fiddes, P.S. *op. cit.*, (68) p. 110; McCormack, B. *op. cit.*, (65) p. 105; McDowell, J.C. 'Learning where to place one's hope: the eschatological significance of election in Barth', *Scottish Journal of Theology* (2000) 53(3), 316-338 (p. 335).

71 Fiddes, P.S. *op. cit.*, (68) p. 111.

power of the Holy Spirit that humanity can participate in the life of God, and salvation becomes the completion of the purpose of election which originates in the eternal being of God.⁷²

Election, creation and purpose

For Barth, all the other actions of God – Creator, Reconciler, and Redeemer, are ‘grounded and determined in the fact that God is the God of the eternal election of His grace’, so that election forms ‘the presupposition of all God’s works’.⁷³ As a result the covenantal relationship is the ‘internal basis of creation’, and creation is the ‘external basis of the covenant’ as the arena for God’s saving action,⁷⁴ the stage for salvation history, and the ‘road or means’ to grace.⁷⁵ Christ therefore is the origin, centre, meaning and goal of creation and history, enabling humanity and the whole of creation to ‘participate in the being of God’.⁷⁶

Because election has priority over all other actions of God, the doctrine of election can be used to form the basis of a theology of purpose by placing God’s decision for humanity and Jesus as its elected representative, prior to God’s act as creator. As Gunton suggests, Barth’s doctrine of election identifies that ‘the God who creates, reconciles, and redeems...is first and foremost the one who elects: that is, who loves and chooses the other to be his own, before the other knows it, before he shares in it, indeed, when he resists it, before, even, he is created’.⁷⁷ Therefore I suggest that God’s election of humanity from eternity, an eternal event prior to creation, implies that God’s creative act has the purpose to produce the creature that can respond to God in covenantal fellowship – the creature whom God has elected.⁷⁸ It is at this point where I believe there is a harmonising between the theological interpretation of purpose and the scientific as suggested by Simon Conway Morris. For election to play out on the stage of Creation, there needs to be a creative biological process that would show signs of purpose resulting in a being like humanity. Therefore biologically purposeful evolutionary processes as described by Simon Conway Morris, are at least consistent with the theological understanding of God’s eternal purposes in election, leading to the ‘inevitable human’, God’s covenant partner.

72 Gunton, C.E. *op. cit.*, (64) p. 145.

73 Barth, K. *op. cit.*, (66) p. 14; Gunton, C.E. *op. cit.*, (66) p. 384.

74 Krötke, W. ‘The humanity of the human person in Karl Barth’s anthropology’, In Webster, J. (ed.) *The Cambridge Companion to Karl Barth*, Cambridge: Cambridge University Press (2000), pp. 159-176 (p. 167). Gunton identifies the universe as ‘the arena on which (God’s) gracious purposes may come to pass’. See Gunton, C.E. *op. cit.*, (66) p. 384.

75 McDowell, J.C. *op. cit.*, (70) p. 323; Tanner, K. *op. cit.*, (21) p. 118.

76 Tanner, K. *op. cit.*, (21) pp. 114 & 125. Also see McDowell, J.C. *op. cit.*, (70) p. 323.

77 Gunton, C.E. *op. cit.*, (66) p. 391.

78 As Barth suggests, ‘the purpose and meaning of the eternal divine election of grace consists in the fact that the one who is elected from all eternity can and does elect God in return’. See Barth, K. *op. cit.*, (66) p. 178.

Furthermore, as Conway Morris has suggested, evolutionary constraints and the ubiquity of convergence point to aspects of evolution which fit within a creation theology.⁷⁹ Therefore we can glimpse the teleological aspects of evolution in biology, and so evolution can be placed within the framework of a purposeful Creation.

Justification for a theology of purpose

This article proposes a theology of purpose using the doctrine of election, which in the author's opinion provides an explanation of the natural order from a theistic epistemic base, in which nature is viewed as God's creation and humanity as the *imago Dei*.⁸⁰ Significantly, election places any discussion of the natural order within a Trinitarian framework in which election is the primal decision of the Trinitarian God, and humanity can participate in the life of God through Christ and in the power of the Holy Spirit, and live in the hope of the life to come. Election also grounds creation's ability to disclose God, by reflecting the rationality of God⁸¹ as a consequence of God's eternal decision for election, and is compatible with the scientific explanation of biologically expressed purpose as discussed above.

One possible objection to proposing a theology of purpose, which places humanity in a position of primacy is that this diminishes the importance of creation as a whole. Colin Gunton, however, identifies humanity as the primary objects of God's providential care and suggests this does not downgrade nature, but rather affirms that nature was created to be perfected 'with and partly through human agency'.⁸² Furthermore human agency also implies ethical praxis because 'If God's purpose is for the redemption and perfection of the creation, all human action will in some way or other involve the human response to God that is ethics'.⁸³ By emphasising nature as 'creation not possession', a praxis of purpose points away from exploitation toward 'a project in which we are invited to share'.⁸⁴ Within this project, the depth of nature bears the 'stamp of everlasting care and promise', where the divine care takes into itself all that exists in the cosmic unfolding.⁸⁵ I propose that the ethical implications of a theology of purpose can be understood in three areas.

1. A theology of purpose entails an 'ethic of care' to answer the ethical question: 'Can we in the present generation envision wholesome possibilities,

79 See (40).

80 These are important criteria in the scheme of T.F. Torrance for a legitimate natural theology. See McGrath, A.E. *op. cit.*, (2) p. 295.

81 *ibid.*, pp. 295-298.

82 Gunton, C.E. *op. cit.*, (20) p. 36.

83 Gunton, C.E. 'The doctrine of creation', In Gunton, C.E. (ed.) *The Cambridge Companion to Christian Doctrine*, Cambridge: Cambridge University Press (1997), pp. 141-157 (p. 144).

84 *ibid.*, p. 155.

85 Haught, J.F. *op. cit.*, (3) p. 158.

make the right decisions, and take the actions that will enhance human health and global well-being?⁸⁶ Central to such an ethic is the principle of interconnection/integrity in which the whole of the natural world, including humanity, is viewed as God's creation and therefore connected. Further, Conway Morris suggests that we can see 'how wonderfully varied our world is, but how underpinned it is by deeper commonalities. We as humans are a product of an evolutionary process and as such are intimately connected to the whole of the created order as we 'share the terrestrial Creation'.⁸⁷ Therefore care for creation is linked to care for humanity; as John Haught suggests, 'As long as the universe is unfinished, so also is each of us... Our personal redemption awaits the salvation of the whole.'⁸⁸

2. An ethic of care also highlights the role of humanity toward each other and toward creation. At a deeper level humans are the same: a single species, the sole survivors of the hominid diversification – we are all human. Theology affirms that all of humanity is made in the image of God therefore we should care for each other as the bearers of this image. Furthermore, the Hebrew understanding of person reflects a holistic image of personhood that embraces heart, soul and mind – our physicality, our emotional, our spiritual and our relational nature. It is therefore necessary to act in such a way as to account for all aspects of our human existence, including our communal nature. As a result, an ethic of care implies a community ethic rather than an individual one, and also relates to the future generations to which we have a moral responsibility.⁸⁹ Humanity's role toward creation is also emphasised in light of a wide understanding of 'stewardship'. The view of 'creation-as-temple-palace' emphasises the importance of creation as God's throne room for which humanity are the stewards. Therefore humanity's role is to work with God in the restoration of humanity and creation, and our ultimate reckoning is with God for the use or abuse of creation which ultimately belongs to God.⁹⁰ Humanity's role as stewards of creation also contains an eschatological perspective, where 'to be the created co-creator is to steward our resources and opportunities in light of our vision of the coming new creation'.⁹¹
3. The Christian life is about a relationship with God, with creation and with each other. It is a life transformed by Christ to be lived in the power

86 Peters, T. & Hewlett, M. *op. cit.*, (6) p. 174.

87 Conway Morris, S. *op. cit.*, (8) p. 303.

88 Haught, J.F. *op. cit.*, (3) p. 155.

89 Peters, T. & Hewlett, M. *op. cit.*, (6) p. 179.

90 Watts, R.E. 'The new exodus/new creational restoration of the image of God: A biblical-theological perspective on salvation', In Stackhouse J. (ed.) *What Does It Mean to Be Saved? Broadening Evangelical Horizons of Salvation*, Grand Rapids: Baker Academic (2002), pp 15-41 (pp. 19-22, 35-36, 39 & 41).

91 Peters, T. & Hewlett, M. *op. cit.*, (6) p. 176.

of the Holy Spirit so that we live in the reality of God's kingdom through love, justice and compassion. Within an ethic of care, the hermeneutic of 'sacrifice'⁹² provides a Christological foundation for the care of creation as a whole. Furthermore, as Michael Northcott suggests, Christ's understanding of 'neighbour' in the double love command can be extended to include the whole of creation, because Christ's redemptive work included the whole of creation.⁹³ Humanity as the *imago Dei* can therefore act in a sacramental way,⁹⁴ as a means of God's grace to each other and to the whole of creation.

Although some may feel uncomfortable with giving humanity a pre-eminent position in creation, Conway Morris reminds us that humanity is unique.⁹⁵ McGrath speaks of the divine rationality embedded in creation⁹⁶ which is compatible with the concept of 'convergence' and the arrival of the inevitable human. Therefore, in my view, the being whom God created for relationship can perceive God's ordering of nature, and in doing so turn toward the Creator in praise.

Another aspect of humanity's uniqueness can be seen in the paradox whereby 'humans have an overwhelming sense of purpose', yet have arisen from a seemingly meaningless process. The arrival of sentience in humans, therefore, is part of the imprinted evolutionary process of terrestrial creation.⁹⁷ Humans represent one unique node of biological inevitability and are as such embedded in the natural world through 'one continuous unfolding'.⁹⁸ This fact is made clearer through genetic analysis which has clearly shown that human beings are an evolved species based on genetic similarities between *Homo sapiens* and other primates, especially the great apes.⁹⁹ Even Darwin himself felt unease with the conclusion from his work that humanity was not the goal or apex of evolution, and our uniqueness is also not lost on some neo-Darwinists

92 Hefner, P. *op. cit.*, (1) pp. 244-248. Hefner uses 'sacrifice' as a model because it is the most widely used hermeneutical category in the New Testament for the life, death and resurrection of Jesus Christ.

93 Northcott, M.S. 'Ecology and Christian ethics', In Gill, R. (ed.) *The Cambridge Companion to Christian Ethics*, Cambridge: Cambridge University Press (2001), pp 209-227 (pp. 224-225). For the double love command, see Matt 22:35-40, Mk 12: 28-34 and Lk 10: 25-28.

94 Gunton, C.E. *op. cit.*, (20) p. 41.

95 Conway Morris, S. *op. cit.*, (8) p. 310.

96 McGrath, A.E. *op. cit.*, (2) p. 188. In pages 227-228, McGrath outlines the laws of nature proposed by Paul Davies: Universal; Absolute; Eternal; Omnipotent. Given this discussion, it may be plausible to add 'Inevitable'.

97 Conway Morris, S. *op. cit.*, (8) pp. 2, 131, 303 & 327.

98 *ibid.*, p. 310 & 312; Haught, J.F. *op. cit.*, (3) p. 155. The quotation is from John Haught.

99 Finlay, G. *God's Books: Genetics and Genesis*, Auckland: TELOS Books (2004), pp. 13-28; Finlay, G. 'Homo Divinus: the ape that bears God's image', *Science and Christian Belief* (2003) 15, 17-40 (pp. 18-32); Tattersall, I. 'Human evolution: an overview', In Miller, J.B. (ed.) *An Evolving Dialogue: Theological and Scientific Perspectives on Evolution*, Harrisburg: Trinity Press International (2001), pp. 197-209 (pp. 206-209).

who admit that of all the organisms, 'we alone are able to resist our genes'.¹⁰⁰

Of particular importance however, is the fact that *Homo sapiens* is the only surviving species of the hominid diversification,¹⁰¹ which I suggest provides a sense of true election. Of all the possibilities, only *Homo sapiens* remains, and only in the form of *Homo sapiens* did God make himself fully known in the person of Jesus Christ. Humanity is unique, truly the elect, not in a negative sense (supremacy), but in a humbling way, in that God has chosen us, the last surviving hominids, and revealed Godself to us in an act of unlimited grace.¹⁰² Therefore the Christian faith provides an interpretative framework for an evolutionary understanding, by insisting that the evolutionary process and the emergence of human beings within that process is the work of God. Within this framework, God is the one who specifies the purpose of humanity's emergence and that of the whole of creation.¹⁰³

Finally, the distinguishing characteristic of the approach suggested in this work is the utilisation of a 'from above' view, which contrasts with the 'from below' interpretation that I consider other theistic evolutionists adopt.¹⁰⁴ Philip Hefner places great emphasis on the natural processes through which God has created, and through which grace and redemption occur. His 'teleonomic axiom' places the conception of meaning and purpose in terms of their placement within, and contribution to natural processes. The notion of purpose is therefore directed to the natural realm where God's will for humanity resides within God's will for the entire natural order.¹⁰⁵ My proposal places God's purposes primarily in the notion of relationship, whereby the purpose for humans is to be able to relate freely to God the Creator. Hence, in describing God theologically as the electing God, a view of God that logically precedes God's act of creation, humanity is identified as the being which God elected in eternity. Therefore in the context of God's creative act leading to the eternally elected humanity, evolution can be understood as a creative process within God's eternal purposes.¹⁰⁶

100 McGrath, A.E. *Dawkins' God: Genes, Memes, and the Meaning of Life*, Oxford: Blackwell Publishing (2004), pp. 45-46. This quotation is from Richard Dawkins.

101 Conway Morris, S. *op. cit.*, (8) p. 270.

102 The question of the relationship between God and the other hominid species remains unanswered.

103 Hefner, P. *op. cit.*, (1) p. 38.

104 'From above' and 'from below' are theological categories traditionally used in relation to Christology which emphasis the eternal and the temporal perspectives of God respectively. See Gunton, C. E. *Yesterday and Today: A Study of Continuities in Christology*, 2nd ed., London: SPCK (1997), pp. 10-11 and 33-34.

105 *ibid.*, pp. 40, 57, 60, 62, 237 & 268-269. The 'teleonomic axiom' states that 'integral to *Homo sapiens* and its evolutionary history are certain structures and processes, the requirements for whose functioning may be said to constitute, at least in a tentative way, goals and purpose for human life'. See p. 40.

106 I do not however want to suggest that the doctrine of election is inconsistent with human freedom, and would imply predetermination (determinism). A discussion of predetermination is outside the bounds of this current study.

Conclusion

It is important to establish the relevance of Christian theology in the world in which we live. Natural theology provides one means of creating dialogue between theology and science, especially since 'the question of how the natural order is to be interpreted is of critical importance'.¹⁰⁷ This article is an attempt to develop an integrated concept of purpose, utilising the theological understanding of nature as God's creation in partnership with the biological understanding of convergence as outlined by Simon Conway Morris. The approach taken contrasts with the competing, and sometimes conflicting concepts of purposefulness (theology/creation), and purposelessness (science/evolution).

Even in theology itself, the tendency has been to interpret any notion of purpose as a religious inference. I would suggest, however, that the recent work of Conway Morris has indicated that purpose can be identified in the biological process of evolution through 'convergence'. In support of this scientifically radical position, I propose that 'convergence' can be supported theologically using the doctrine of election. Since God's election is prior to God's creative act, evolution can be understood as purposeful biologically – to create the inevitable being made in the image of God that God has elected for a covenantal relationship. This theological understanding of purpose also entails an ethic of care so that the inevitable human can live out the life it was created to live, for the benefit of the whole of creation and in praise of the Creator.

Acknowledgement

I would like to acknowledge the help and guidance of Dr Nicola Hoggard-Creegan in the development of this article.

Graham O'Brien (PhD Cellular and Molecular Biology) is currently undertaking postgraduate studies in theology (MTh) and is soon to be ordained in the Anglican Diocese of Nelson, New Zealand.

107 McGrath, A.E. *op. cit.*, (2) p. 303.