

Is it too late?

Doing Theology in the Anthropocene.

Clive Pearson,

Research Fellow, PaCT, Charles Sturt University.

From Chernobyl to Paris

Towards the end of last century Jürgen Moltmann proposed that Christology should be aligned within a ‘framework of nature’. It was time for a ‘new cosmic Christology’ which would end ‘the historical Christology of modern times’. That emphasis on historicity had led to an anthropocentric understanding of Christ and effectively ‘abandoned nature to its disastrous exploitation by human beings’.¹ It was supported by a theology which separated nature from grace and dismissed ancient traditions to do with the cosmic Christ as mythic and speculative. Moltmann wished to recover the ‘therapeutic powers of Christ in the world’s present situation’.² For him the Chernobyl meltdown of 1985 had become a symbol of a much deeper concern that transcended the evident nuclear risk. Moltmann presupposed that ‘human beings cannot be ultimately healed and saved’ unless nature is also saved for, as he added, ‘human beings are natural beings’. Chernobyl was thus bearing witness to ‘the slow death of ecological degradation’. Moltmann posed the question which he himself subsequently sought to address: ‘Where is Christ after Chernobyl?’³

That emphasis on nature and its vulnerability is, of course, familiar to those who have been working for some time in the discipline of ecotheology. This is a field of self-conscious enquiry which now has a history of five decades of growing concern. The ecumenical editors of *Christian Faith and the Earth* (2014) note that a Christian ecotheology manifests itself in ‘most confessional traditions’ and in ‘all corners of the world’.⁴ It is widely recognized by any one of a number of leading theologians that how we care for God’s good creation is the most

¹ Jürgen Moltmann, ‘The Cosmic Christ’, *Jesus Christ for Today’s World*, (London: SCM Press, 1994), pp. 88-89.

² Moltmann, ‘The Cosmic Christ’, pp. 89-90.

³ Moltmann, ‘The Cosmic Christ’, p. 89.

⁴ Ernst Conradie, Sigurd Bergmann, Celia Deane-Drummond, and Denis Edwards (eds.), ‘Discourse on Christian Faith and the Earth’, *Christian Faith and the Earth: Current Paths and Emerging Horizons in Ecotheology*, (London and New York: Bloomsbury T&T Clark, 2014), pp. 3-4.

pressing issue facing humanity today. That same level concern is to be found, of course, in the recent papal encyclical, *Laudato Si'* (2015) where Pope Francis addresses the 'throwaway culture of today'. For the sake of 'our common home' the Pope weaves together the plight of the poor and the accelerated dangers of climate change – climate itself being 'a common good'.⁵

With the passage of time the basis upon which Moltmann made his call for a cosmic Christology within a 'framework of nature' has the feel of being rather modest and a mite innocent. It is not a case of there being limited merit in his revivifying of an earlier expression of doctrine for 'today' - and which involved examining the relationship of Christ to a differentiated understanding of the doctrine of creation⁶ as well as an enquiry into the relationship between evolution and eschatology.⁷ These are not the points of argument which lend themselves to a certain dated feel in terms of *chronos* time. The *kairos* moment which provoked his question remains: the 'problem' is elsewhere. Reading Moltmann on Chernobyl there is no intimation of rising sea levels, more extreme weather events, ocean acidification, and carbon emissions.⁸ It is a long way from Chernobyl to Tuvalu⁹, Naomi Klein's stunning description of Nauru¹⁰, and Kiribati whose President, Antone Tong, informed the *New Yorker*

⁵ Pope Francis, *Laudato Si': On Care of Our Common Home*, (Vatican: Libreria Editrice Città del Vaticano, 2015), pp. 26-30; The weakness of *Laudato Si'* is its failure to address issues of birth control and overpopulation.

⁶ Moltmann is particularly keen to resist an imbalance in the relationship of creation and redemption in Christian thinking. "Either creation is down-graded into a preparation for redemption, or redemption is reduced to the restoration of creation-in-the beginning". Moltmann situates the mediation of the cosmic Christ alongside "three separate strands or movements": i). Christ as the ground of the creation of all things (creation-in-the-beginning); ii). Christ as the driving power in the evolution of creation (continuous creation); and, iii). Christ as the redeemer of the whole creation process (the new creation). *Jesus Christ for Today's World*, p. 94.

⁷ Through a reading of the work of Teilhard de Chardin, Moltmann draws out the distinction between evolution and eschatology, *Jesus Christ For Today's World*, pp. 99-106.

⁸ Moltmann engages further with the theme of the earth, ecology and our future in *The Source of Life: The Holy Spirit and the Theology of Life*, (Minneapolis: Fortress Press, 1997), pp. 111-124; *God for a Secular Society: The Public Relevance of Theology*, (Minneapolis: Fortress Press, 1999); pp. 92-116; *Sun of Righteousness, Arise! God's Future for Humanity and the Earth*, (Minneapolis: Fortress Press, 2010); *Ethics of Hope*, (Minneapolis: Fortress Press, 2012), 109-164;

⁹ Laura K. Curlew, *The Cultural Impacts of Climate Change: Sense of Place and Sense of Community in Tuvalu, A Country Threatened by Sea Level Rise*, Published doctoral thesis, University of Hawai'i, Honolulu, 2012; Maina Talia, "Towards Fatele Theology: A Contextual Theological Response in Addressing Threats of Global Warming in Tuvalu", unpublished MTh thesis, Tainan Theological College and Seminary, 2009; Tafue Lusama, "Punishment of the Innocent: The Problem of Global Warming with Special Reference to Tuvalu", unpublished MTh Thesis, (Tainan Theological College and Seminary, 2004); Ruth Moon, "Teaching Natural Theology as Climate Changes Drown a Way of Life: Pacific Islanders relearn God's care as rising sea levels threaten the future", *Christianity Today*, 14 February 2012.

¹⁰ Naomi Klein, 'Climate Change and Capitalism', Festival of Dangerous Ideas, Sydney Opera House, 5 September 2015. Klein wove together Nauru's history of phosphate extraction, its being a 'black site' for the detention of asylum seekers, and the threat which is posed to it by rising sea levels. She referred to an island which has been violated inside-out and now is facing a threat outside-in. See, *This Changes Everything: Capitalism v The Climate*, (New York: Simon and Schuster, 2014), pp. 161-169.

magazine, “we are the polar bears of the Pacific”.¹¹ The interval between Chernobyl and the Paris Climate Agreement of 2015 is *via* the politics of Kyoto and the Copenhagen debacle.

The editors of *Christian Faith and the Earth* have also identified a further shift. It is no longer adequate for ecotheology itself to be a ‘concern in the specialized branch of environmental ethics or in creation theology as a theme in systematic theology or biblical studies’.¹² Moltmann’s desire for a Christology ‘within a framework of nature’ now needs to be seen inside a more comprehensive ‘reinvigoration of doctrine’. It is time to ‘revisit the whole of Christian thinking’: an ecotheology must offer more than a ‘revisited theology of creation’. Ernst Conradie has taken the lead in the launch of the Christian Faith and Earth Project (2012) which is designed to cover the full systematic agenda through a lens of environmental crisis – and, in conversation with whatever other intellectual disciplines might be appropriate.¹³ (The theological *locus* for 2015 is sin).

It is evident that the field is becoming more complex – and urgent. The specific naming of climate change with explicit reference to theology is relatively new. The publication of *Systematic Theology and Climate Change*, edited by Michael Northcott and Peter Scott, is a significant marker in and of itself. For the first time the full core systematic agenda is dedicated to addressing the implications of climate change for Christian doctrine and praxis. They seek to ‘consider the implications for Christian doctrine of the scientific reporting of anthropogenic climate change and its effects on humanity and the earth’. Their work is self-consciously set within the ‘classical definition of theology provided by Anselm as ‘faith seeking understanding’. They are conscious of entering into new territory for a comprehensive systematic theology: they argue that the present is the right time for a robust account of ‘confessional doctrines’ that might underpin ‘the distinctiveness of Christian moral and liturgical practices’ in a time of crisis.¹⁴ Of particular interest is the inclusion of a topic seldom found in the conventional theological line-up: Rachel Muers invites us to “pause” over the

¹¹ John van Tiggelen, “Cold Comfort: The President of Kiribati Goes on a Fact-Finding Mission in the Arctic”, *The Monthly*, December 2014-January 2015, pp. 20-26. Betsy Morais, ‘President Tong and His Disappearing Islands’, *The New Yorker*, 8 June, 2014; Anote Tong, “Statement by HE President Anote Tong 69th UNGA, New York, 26 September 2014”, http://www.un.org/en/ga/69/meetings/gadebate/pdf/KI_en.pdf “It has been an eye opener for me what is at stake beyond our own immediate concerns. This visit to the Arctic highlighted the stark reality of the very direct connection between the destruction of this polar region to what is happening to us in the equatorial region”. Sophie Yeo, “Kiribati President: My People are the Polar Bears of the Pacific”, <http://www.rtcc.org/2014/09/23/kiribati-president-my-people-are-the-polar-bears-of-the-south/>

¹² Conradie *et al*, ‘Discourse on Christian Faith and the Earth’, pp. 3-7.

¹³ Conradie, *et al*, ‘Discourse on Christian Faith and the Earth’, pp. 7-8.

¹⁴ Michael S. Northcott and Peter M. Scott, ‘Introduction’, in Michael S. Northcott and Peter M. Scott, *Systematic Theology and Climate Change: Ecumenical Perspectives*, (London and New York: Routledge, 2014), , pp. 1-5.

inclusion of ‘creatures’ in between the more usual doctrines of creation and humanity.¹⁵ Moltmann would, no doubt, be pleased, given his concern for nature and natural beings.

Welcome to the Anthropocene

This bringing together of a systematic theology and climate change represents a public relevance to the Christian faith. It opens up a number of other emerging horizons which have to do with how this disciplined work is received and of use. There has been / there is work to be done on how this systematic theological reading of climate change is informed by and informs the ways in which climate change is managed in politics¹⁶, industry, the media¹⁷, and in studies on denial¹⁸. The transdisciplinary nature of what is required in making a response to what has been called the ‘superwicked problem’¹⁹ of climate change is betrayed in a seemingly insignificant reference to the Anthropocene made by Northcott and Scott in their introduction to the anthology. It is referred to *en passant* as a ‘new world’, ‘the new era’, and, in a variation of Moltmann’s Chernobyl question (though echoing more intentionally Bonhoeffer), “who is Jesus Christ in the Anthropocene?”²⁰

¹⁵ Rachel Muers, ‘Creatures’, in Northcott and Scott, pp. 90-108.

¹⁶ Michael S. Northcott, *A Political Theology of Climate Change*, (London: SPCK, 2014).

¹⁷ James Painter, *Climate Change in the Media: Reporting Risk and Uncertainty*, (London and New York, I.B. Tauris, 2013).

¹⁸ Kari Marie Norgaard, *Living in Denial: Climate Change, Emotions and Everyday Life*, (Cambridge: MIT Press, 2011); also, “Climate Denial: Emotion, Psychology, Culture and Political Economy”, in Dryzek *et al.*, *The Oxford Handbook*, pp. 399-413; Riley E. Dunlap and Aaron M. McCright, “Organized Climate Change Denial”, in Dryzek *et al.*, *The Oxford Handbook*, pp. 144-160; Hayden Washington and John Cook, *Climate Change Denial: Heads in the Sand*, (London and Washington: Earthscan, 2011); Stanley Cohen, *States of Denial: Knowing About Atrocities and Suffering*, (Cambridge: Polity Press, 2001); Per Espen Stoknes, *What We Think About When We Try Not To Think About Global Warming: Toward A New Psychology of Climate Change*, (White River Junction: Chelsea Green Publishing, 2015); George Marshall, *Don’t Even Think About It: Who Our Brains Are Wired To Ignore Climate Change*, (New York: Bloomsbury, 2014).

¹⁹ The term “wicked problem” was first coined by Horst Rittel and Melvin Webber, “Dilemmas in a General Theory of Planning”, *Policy Sciences*, Volume 4, (1973), pp. 155-169. It connoted a sense of being malignant, tricky, vicious or aggressive. The contrast was made with “tame” problems. Rittel and Webber defined wicked problems as ones which are: i). difficult to define; ii). full of interdependencies and are multi-causal; iii). liable to unforeseen consequences; iv). not stable and constantly evolving; v). without clear solutions; vi). are socially complex; vii). not likely to sit within the responsibility of any one organisation; viii). are likely to involve changing behaviour; and x). characterised by chronic policy failure. Writing in *Policy Sciences* (2012), Kelly Levin, Benjamin Cashore, Steven Bernstein and Graeme Auld have defined climate change as a “super-wicked problem”. Such problems represent a new class of problem which possess four key features: i). time is running out; ii). those who cause the problem also seek to provide the solution; iii). the central authority needed to address them is either weak or non-existent; and, iv). irrational discounting occurs which pushes responses into the future. “Overcoming the tragedy of super wicked problems: constraining our future selves to ameliorate global climate change.” *Policy Sciences* 45.2 (2012), pp.123-152.

²⁰ Northcott and Scott, *Systematic Theology and Climate Change*, p. 5; Northcott further refers to the Anthropocene in his article on ‘Holy Spirit’, pp. 60-62.

Now it is this reference to the Anthropocene which should attract attention. The term is presently under consideration by a Working Group of the International Commission on Stratigraphy to determine whether the evidence in rocks and sediments is sufficient for a new geologic epoch – the Anthropocene – to be recognized as a successor to the Holocene epoch which has lasted for the preceding 12,000 years. In technical terms the issue at stake is whether the Anthropocene should be added to the Geological Time Scale.²¹ It is expected that a recommendation will be made in 2016.

The momentum which lies behind this initiative has its origin in an accidental use of the term made at a conference by the atmospheric chemist and Nobel Prize winner Paul Crutzen.²² It struck him in the middle of discussion that talk of the Holocene was no longer appropriate. The first published reference to the Anthropocene followed soon after and is to be found in an article written conjointly by Crutzen and the biologist Eugene Stoermer for the newsletter of the International Geosphere-Biosphere programme. That was in 2000.²³ The basic idea to which the word is pointing is that we have now entered into a new age / potentially new epoch which is profoundly affected by human agency – indeed humanity has become a geologic agent.

Now geology has posed a problem for theology in the past. The work of Charles Lyell, especially his *Principles of Geology* (1830-1833), called into question the literal reading of the

²¹ The Geological Time Scale is the official scale, determined by the International Commission on Stratigraphy, which divides up the Earth's history into eons, eras, periods, epochs and ages. Each one of those divisions represents a diminishing length and geological significance. It is possible that the working group of the Stratigraphy Commission might suggest that the Anthropocene should be seen as an epoch – 'that is, longer than an age but shorter than a period; but ... if society does not respond soon to the signs of climate disruption then it may be necessary to upgrade the Anthropocene from an epoch to a period.', Clive Hamilton, "Human Destiny in the Anthropocene", in Hamilton *et al*, *The Anthropocene and the Global Environmental Crisis*, p. 33.

When the Anthropocene began is subject to debate. The options have ranged from the beginnings of agriculture (7-8,000 years ago) through the industrial revolution to the "Great Acceleration" commencing in 1945 when a layer of radionuclides was spread over the face of the Earth. Dipesh Chakrabarty argues that the Anthropocene brings together three different kinds of history: 'the history of the Earth system, the history of life including that of human evolution of the planet; and the more recent history of the industrial civilisation. ... Humans now unintentionally straddle these three histories that operate on different scales and at different speeds.' "The Anthropocene and the Convergence of Histories", in Hamilton *et al*, *The Anthropocene and the Global Environmental Crisis*, p.44. See also, Christophe Bonneuil and Jean-Baptiste Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, (London and New York: Verso, 2016).

²² Paul J. Crutzen and Hans Günter Brauch (eds.), *Paul J. Crutzen: A Pioneer on Atmospheric Chemistry, Biosphere, and Climate in the Anthropocene*, (New York: Springer, 2016).

²³ Paul J. Crutzen and Eugene F. Stoermer, 'The Anthropocene', *Global Change Newsletter*, 41 (2000), pp. 17-18. It seems as if Stoermer had been using the term informally since the 1980s. Crutzen's first reference to the Anthropocene came at a conference where the labelling 'Holocene' no longer seemed right – and, independently of Stoermer, "I just made the word up on the spur of the moment. Everyone was shocked. But it seems to have stuck". Fred Pearce, *With Speed and Violence: Why Scientists Fear Tipping Points in Climate Change*, (Boston: Beacon Press, 2007), p. 21.

days of creation to be found in *Genesis* before Charles Darwin's theory of evolution. In the present case of the Anthropocene (and its implications) geology is not on its own. The Anthropocene has become something of an umbrella term for an ever-widening array of disciplines. That which is geological quickly becomes a concern for anthropogenic climate change and the cultural response.

Writing in the introduction to their anthology on *The Anthropocene and the Global Environmental Crisis* Clive Hamilton, Christophe Bonneuil and François Gemenne have identified a further two discrete discursive fields other than the narrowly specific geological: The Earth systems sciences and the social sciences. The former comprise atmospheric chemistry, climatology, oceanography and geology.²⁴ Its focus of interest lies in whether or not the earth system as a whole has 'reached its boundaries'. Has a tipping point been reached - do we now find ourselves in an Earth system for which there is simply 'no-analogue state'?²⁵ The evidence for such, if this is indeed the case, is to be found in rising temperatures and sea-levels, 'large scale shifting of sediment, rapid rates of species extinction, and the prevalence around the globe of widespread artificial molecules'.²⁶ What this reading of the Anthropocene presumes is 'the cumulative impact of civilisation' on the planet.²⁷

This reading of the Anthropocene from the perspective of the Earth system sciences is more ominous (at least at face value) than the 'mere' recommendation of whether or not the working group decides that a golden spike should be marked in the Earth's stratigraphy.²⁸ Hamilton *et al* argue that this naming of the Anthropocene is tantamount to a 'step-change' in the way in which human beings relate to the natural world. It is, further, a change which has come about because humans themselves have become a 'force of nature', every bit as much as are 'volcanism, tectonics, the cyclic fluctuations of solar activity, or changes in the Earth's

²⁴ The Earth system sciences take a broader view than the geologists who observe a very tight formula for defining a new period. The Earth systems scientists monitor the data accumulated in the various spheres of the Earth systems (rock, water, ice, biological life, air) lithosphere, hydrosphere, cryosphere, biosphere, atmosphere) and how they relate to one another. It is interdisciplinary and not solely confined to rock data in the search for an interval change.

²⁵ The lack of precedents is also dealt with by John S. Dryzek, Richard B. Norgaard, and David Schlosberg, "Climate Change and Society: Approaches and Responses", in Dryzek *et al*, *The Oxford Handbook on Climate Change and Society*, (Oxford: Oxford University Press, 2011), p.3. The social problem solving mechanisms we currently possess were not designed, and have not evolved, to cope with anything like an interlinked set of problems of this severity, scale and complexity. There are no precedents."

²⁶ Hamilton *et al*, 'Thinking the Anthropocene', p. 3.

²⁷ Hamilton *et al*, 'Thinking the Anthropocene', p. 3. That impact can include the transformation of landscape, urbanisation, species extinction, resource extraction and waste dumping as well as disruption to natural processes such as the nitrogen cycle.

²⁸ Hamilton *et al*, 'Thinking the Anthropocene', p. 2. It is the responsibility of stratigraphers to separate two intervals in geologic history by means of a golden spike on the basis of evidence found in rocks and sediment.

orbital movements around the Sun'.²⁹ The Anthropocene marks 'not just a new geological regime for the Earth but also a new human condition'.³⁰ The implications are far-reaching for human life in both the immediate and longer term.³¹

Now theology, of course, is not geology – nor is it one of the Earth system sciences. Its subject may be divinity but in terms of method and its concerns it is more obviously closer to the humanities and the social sciences. The extent to which the Anthropocene is attracting the interest of these disciplinary fields can easily be demonstrated.³² What Hamilton *et al* wish to argue is that these forms of knowing can no longer be pursued as if 'they were above material and energy cycles, unbound by the Earth's finiteness and metabolism'. It is time for them 'to come back down to earth': all of the essential ideas which lie behind the study of what it means to be human, politics and government, ethics, history and what is nature itself are 'ask[ing] to be rethought'. Hamilton *et al* single out ethics and the quandary of how is a democratic politics supposed to handle transnational issues that extend over deep time for special attention.³³ Welcome to the Anthropocene.³⁴

The recent writings in the field of *Systematic Theology and Climate Change* have begun to take note of the Anthropocene. It is highly likely that this tendency will accelerate while the church, on past record, is looking the other way. The prospect of doing theology in a new geologic era (either formally or culturally determined) asks a great deal of the Christian faith. For the past 2,000 years the practice of theology has taken place within a particular division of time. Writing in the company of Hamilton *et al* Northcott has identified how Christian faith and praxis has operated within what might be named the 'three ages of Earth': from creation to Christ, from the birth of Christ to the present and near future, and from that time to the eschaton. It is rather obviously a theological rendering of time into which both divinity and humanity are placed. The unfolding of the years, *chronos* time, also provides a framework for

²⁹ Hamilton *et al*, 'Thinking the Anthropocene', p. 3.

³⁰ Hamilton *et al*, 'Thinking the Anthropocene', pp. 3-5.

³¹ It is equally evident that in the next several decades the human inhabitants of this planet will face global environmental shifts of an unprecedented scale and speed. Hamilton *et al* believe it is likely to be a more violent world, in which geopolitics become increasingly confrontational. And there is no certainty of what lies beyond this upheaval - a permanent Anthropocene, a new age, a new balance between humanity and nature, an age in which our species no longer exists?

³² Jedidah Purdy, *After Nature: The Politics of the Anthropocene*, (Cambridge, Mass: Harvard University Press, 2015); Adam Trexler, *Anthropocene Fictions: The Novel in a Time of Climate Change*, (Charlottesville: University of Virginia Press); Timothy Clark, *Ecocriticism on the Edge: The Anthropocene as a Threshold Concept*, (London and New York, Bloomsbury Academic, 2015).

³³ Hamilton *et al*, 'Thinking the Anthropocene', pp. 9-12.

³⁴ Elizabeth Kolbert, "Welcome to the Anthropocene", *The Sixth Extinction: An Unnatural History*, (New York: Henry Holt, 2014), pp. 92-110.

an intergenerational history. That accounting of time has been ruptured by the invention of deep time or geologic time. For the origins of such Northcott looks back to James Hutton whom he credits with invention of deep geological time and whose work would duly influence Lyell. It now appears as if the history of the Earth extends back in and through a much larger sequence of eras, from which humanity has been absent. Northcott wryly observes that confronted with this deep chronology the human presence and our intergenerational history is peripheral.³⁵

Now none of that is new. For just a moment let us leave behind the theological pattern of time and see what things look from the perspective of deep time. There is no need for us to consult yet the deep futurist. What it now clear is that all of our theology hitherto has been done within one period – the Holocene period. From now on we are faced with doing theology, the practice of being church, offering leadership, being missional etc in. the Anthropocene (and, one might add, whatever comes our way *via* the NASA probes which follow in the wake of New Horizons). What might that mean? How well prepared are we? Is this not yet further confirmation of humanity's displacement from the centre of creation?³⁶

What is at stake here is much more than a case study in Christian ecological ethics, a brief review of Moltmann's thinking on Christology after Chernobyl, or a short course on the doctrine of creation. The dilemma which the beginning of the Anthropocene posts is the potential ending of the human species. Hamilton has already written the requiem.³⁷ Tim Flannery is a mite more optimistic.³⁸ It is, of course, well nigh impossible to imagine what shape the deep chronology will take. Will the Anthropocene turn out to be "good" or "bad"? Will the Earth be susceptible to geo-engineering and a new balance between humanity and the created order be arrived at? Will we somehow through becoming a modified species? There is already current much talk of robotics, biogenetics and various implants and other medical procedures which have already sent us down the road of becoming post-human or trans-human (*h+*) Or is it too late? Will the Earth rid itself of us?

Bonneuil suggests that humanity is currently living inside four narratives of the Anthropocene. These narratives or story-lines help frame our interpretations of what is currently happening, why it has happened and what will happen with respect to our place within

³⁵ Michael S. Northcott, 'Eschatology in the Anthropocene: From the *Chronos* of Deep Time to the *Kairos* of the Age of Humans', in Hamilton *et al.* *The Anthropocene and the Global Environmental Crisis*, pp.100-112.

³⁶ Brian Cox and Andrew Cohen, "Where Are We?", *The Human Universe*, (London: William Collins, 2014), pp. 1-56.

³⁷ Clive Hamilton, *Requiem for a Species: Why We Resist The Truth About Climate Change*, (Abingdon: Earthscan 2010).

³⁸ Tim Flannery, *Atmosphere of Hope; Searching for Solutions to the Climate Crisis*, (2015).

the Earth systems. The first narrative effectively privileges ‘scientists as shepherds of humankind and of the Earth’ and advocates for ‘more science and green technologies’.³⁹ The second is an ecological pragmatism which is effectively post-nature: ‘Nature no longer runs the earth. We do’. We should welcome the Anthropocene and we will save the earth through salvific acts of technology, ‘creating and recreating it again and again for as long as humans inhabit it.’⁴⁰ The third storyline presupposes tipping points already arrived at and is eco-catastrophist. This narrative is not one of better lives, better knowledge, better dominion over the earth. Our history of emerging into the Anthropocene is one of unsustainable practices, resource depletion, the transgressing of planetary boundaries and the increasing complexity of life which releases fresh vulnerabilities and a sequence of tipping points.⁴¹ The fourth and final narrative is a variation in Marxism. It is eco-Marxist in its claim that capitalism cannot maintain nature.⁴² Bonneuil does not seek to judge which is the best grand narrative. His purpose is to demonstrate the plurality of narratives which surround us we enter further into the Anthropocene. It enable us with the chance of situating us inside this range of storylines and nurture an imaginary of the Earth, nature and our place within it.⁴³

Endings

It is evident that this talk about the Anthropocene is not just about its beginning. It is also about the possibility of endings. The rhetoric rather easily slides into the apocalyptic and there is much comparative religious and secular discussion on such matters at the moment. That obvious concern for the apocalyptic still does not press quite hard enough. From the perspective of a systematic theology the Anthropocene presents us with the demands of eschatology.

It is here that the innovative thinking of Stefan Skrimshire is especially helpful. Skrimshire was given the task of dealing with eschatology in Northcott and Scott’s *Systematic Theology and Climate Change*.⁴⁴ In his introduction Skrimshire argues that eschatology is more than just ‘reasoning about the end’. It is also a ‘psychological-phenomenological

³⁹ Christophe Bonneuil, “The Geological Turn: Narratives of the Anthropocene”, in Hamilton *et al*, *The Anthropocene and the Global Environmental Crisis*, pp. 18-23.

⁴⁰ Bonneuil, “The Geological Turn”, pp. 23-26.

⁴¹ Bonneuil, “The Geological Turn”, pp. 26-27.

⁴² Bonneuil, “The Geological Turn”, pp. 27-29.

⁴³ Bonneuil, “The Geological Turn”, pp. 29-31.

⁴⁴ Stefan Skrimshire, ‘Eschatology’, in Northcott and Scott, *Systematic Theology and Climate Change*, pp. 157-174.

experience'; it is about where we may 'legitimately place our hope' at a personal level (life after death) through to the fate of the cosmos and 'the end of all things'. Eschatology raises questions with how we should act in the light of an 'imminent' end and on what basis that action should be built: 'What does one *do* when the end is pronounced?' How does one live in the world in which time remains?

Skrimshire is writing with a deep awareness of climate change. He sees the present time as a time of radical uncertainty. We do not know whether we have already passed a tipping point as to what can be done for the sake of future humanity. It is unclear whether any activism we engage in now will have a sufficient effect. This concern for 'the end' of things raises abruptly the question of what is achievable and what is not – and we cannot answer that question now in advance. The problem is not one of cognitive dissonance or a lack of information – indeed how much information would we require? Are we simply to 'wait' on the end of all things? Or, are we to seek to transform the present, even if the critical threshold has already been passed and our acting is already marked by a future futility? These are tough existential questions.

All of which leads us back to endings. We now talk a great deal about the common good; the church makes statements on fossil fuels and rising sea levels; there is activism – but Skrimshire poses the awkward possibility that we have now surpassed the critical threshold. What if we are not able to say when the tipping point has or will arrive? What if Moltmann is right? 'we cannot know whether the die is cast and the fate of the human race already sealed' – Paris notwithstanding.

Hamilton *et al* identified the rather worrying presumption that once we find ourselves in the Anthropocene we are in a realm for which there is no analogue, no precedent. And, of course, in terms of the geological and Earth system sciences that is true, but is it true for theology? This step-change and radical sea of uncertainty enables a Christian eschatology to hove into sight. In the wake of Chernobyl Moltmann turned to the earliest traditions of a cosmic Christology; at the dawning of the Anthropocene Skrimshire revisits the apostle Paul, his 'groaning creation', and his advice to the church at Corinth that 'the present form of the world is [indeed] passing away". (1 Corinthians 7:31). Those who first followed the 'newly crucified and resurrected messiah' knew what it was like to live in the interim.⁴⁵ And, what is more, this

⁴⁵ Skrimshire, 'Eschatology', pp. 157-158.

is a typology which has made itself felt in other periods of church history, most notably during the Reformation.

Now, of course, our living in the interim is not a carbon copy of that early experience. In the Anthropocene we have little option but to recognize that *homo sapiens* has become a ‘geologic agent’. In a manner much more serious than Moltmann envisaged following on from Chernobyl. ‘humanity has changed its habitat at a deep level’.⁴⁶ Our dependence on energy is such that John Williams has posed the idea that the human species should now be deemed to be *homo energos*.⁴⁷

It is also now clear that human history can no longer proceed upon the expectation that nature’s timing is slow in times of geological change and seasonal. The effects of anthropogenic climate change have come with accelerating speed and an increasing violence which is consistent with *Laudato Si*’s concern for the ‘rapidification’ of life.⁴⁸ That past slowness allowed for humanity to concern itself in a rather autonomous manner with progress and the quest for liberation.⁴⁹ That time is passing as intergenerational history and deep geologic time are coming together.

It is against this kind of brooding background – and Bonneuil’s four narratives – that the recent Paris agreement should be read.⁵⁰ Writing on-line on The Conversation Hamilton sought to address the question to do with how should we respond to its outcomes. He himself felt torn in two directions. There was, of course, reason to celebrate a number of diplomatic successes, especially given the highly fraught nature of the politics of climate change.⁵¹ There is good reason to take heart in this level of momentum and the implication that Paris has struck a mortal blow to climate sceptics.⁵² The willingness to reduce carbon emissions, the apparent commitment of all parties, a desire for the developed world to assist those threatened most by global warming and rising sea levels, a desire to keep warming well below 2 degrees and, if possible, pursue 1.5 degrees – all these things are to be welcomed. But Hamilton also found

⁴⁶ Skrimshire, ‘Eschatology’, p. 158.

⁴⁷ John Williams, “Why the Earth Needs A Theology of Energy – The Arrival of *Homo Energos*”, unpublished PhD Thesis, Charles Sturt University, 2015,

⁴⁸ Pope Francis, *Laudato Si*, p.23

⁴⁹ Skrimshire, ‘Eschatology’, p. 159.

⁵⁰ Paris agreement, <http://unfccc.int/resource/docs/2015/cop21/eng/l09r0>

⁵¹ Michael Northcott, *A Political Theology of Climate Change*, (Grand Rapids and Cambridge: Eerdmans, 2013).

⁵² Clive Hamilton, “Good Deal or Bad Deal? Emotional Turmoil as Paris Climate Talks Draw To A Close”, *The Conversation*, 12 December, 2015. Naomi Oreskes is a little more cautious, though. The potential strategy for sceptics is to argue that ‘renewable sources can’t meet our energy needs.’ What is required is a ‘wholesale expansion of nuclear power’. Oreskes argues to the contrary. “There is a New Form of Climate Denialism to Lookout For – So Don’t Celebrate Yet”, *The Guardian*, 17 December 2015.

himself unable to close his ears to scientists who argue that it is still too little, too late. In a similar vein Peter Hartcher in *The Sydney Morning Herald* advises readers that “the atmosphere can’t read press releases” and declarations of victory are premature. The deal is unenforceable and maybe time has run out: “the world is still on a trajectory to irreversible climate change”.⁵³ The momentum lying behind the rhetoric of climate justice, nevertheless, allows for an interim ethic of reasonably good will when the alternative is all too likely to be the default position.

In terms of Christian belief and practice the history of eschatology has demonstrated how previous ‘storms’ have far too frequently led to ‘an upsurge in apocalyptic thinking which is often one of harsh judgement, annihilation and impending doom’⁵⁴ - and the deliverance of the elect and the relative few.

Skrimshire distances himself from such apocalypticism and prefers to consider the purpose of eschatology. Facing the possibility that the effects of climate change we have already passed over the threshold of no return, a Christian eschatology still endeavours to ‘remain faithful to two features of the Christian faith’ – (i). there are grounds for hoping in a future that is given by God; ii). God’s presence in the world makes possible good action – ethics – in the interim before the end. In the Anthropocene the natural world (as we know it) may well now be beyond repair: to what extent does a Christian eschatology transform that ethical life from one of ‘mere waiting’ as opposed to that of ‘transforming the present’, maybe along the lines set out in *Laudato Si’* with one or two significant provisos.⁵⁵

Seen from this perspective Skrimshire rightfully reminds us that eschatology is not just about endings. It is also intimately bound to how ‘we act in the time we have at our disposal in the full knowledge of an end being likely’.⁵⁶ There is more to this eschatological message, though. Simply expressed in this way we have a virtuous secular eschatology. Skrimshire grounds this ethical life in the theological confession of the presence of God and, as we have seen, a future that is given by God. Whatever that confession might mean in actual practice – and here I am excluding the possibility of an interventionist God who re-sets the natural world - it does suggest that this current ending may be a *penultimate* ending. It does not necessarily

⁵³ Peter Hartcher, “Paris Climate Agreement: More Hot Air Won’t Save Us From Oblivion”, *The Sydney Morning Herald*, 15 December 2015.

⁵⁴ Skrimshire, ‘Eschatology’, p. 163

⁵⁵ The proviso is the failure of *Laudato Si’* to deal with birth control and the continuing population explosion. See, Robert Manne, “*Laudato Si’*: A Political Reading”, *The Monthly*, 1 July, 2015; Robert Manne, “*Laudato Si’*: A Political Reading”, *The Monthly*, 1 July, 2015

⁵⁶ Skrimshire, p. 163.

signify the *ultimate* end which comes from God and which lies hidden within the imagery of a new heaven, a new earth, the heavenly city, the kingdom of God.

The ethical question which arises from this distinction of the ultimate from the penultimate is obvious. Is a longer future in the interim better than a shorter version? If it is, ‘what is it that makes the prolongation of the present world worth fighting for?’⁵⁷ For theological reasons Skrimshire prefers the former option: the latter leads to pessimism as well as the more serious issue of our remedial actions being seen as a form of obstruction to the carrying out of the divine intention.⁵⁸ Immediately we find ourselves then on the brink of much larger questions to do with the character of God and the problem of theodicy, now set within the context of the Anthropocene. Has God abandoned this natural world – this ‘good creation’ – for another one?

The interim without an appropriate ethic is likely to be nasty. The strength of *Laudato Si’* is the way in which it binds climate change – which it sees as a common good – with a profound concern for the poor who are much more likely to feel the effects of ecological degradation before those who are rich by comparison. *Laudato Si’* may indict the present age as one of a ‘throwaway culture’ and not talk of Golden Spikes and the Anthropocene. It has nevertheless captured an ethic for the interim which is informed by the claims Christ makes upon us and the prospect of a ‘realignment within God’s redemptive future’.⁵⁹

Who is Jesus Christ in the Anthropocene?

It is arguably the case that the doing of theology in the Anthropocene should begin with eschatology. It should come first and not last – and like Moltmann’s eschatology in the service of a theology of hope permeate and pervade the whole. In the Anthropocene it is obvious that the doctrine of what it means to be human (through all due attention being given to what it means to be human, a creaturely being made in the image of God yet sinful) will be of paramount concern.

Even if that is so, for such a theology to be Christian, the task must eventually come back to Northcott and Scott’s variation on Moltmann’s Chernobyl question: ‘Who is Jesus Christ in the Anthropocene?’ It must eventually do that because, as Celia Deane-Drummond

⁵⁷ Skrimshire, ‘Eschatology’, p. 161.

⁵⁸ Skrimshire, ‘Eschatology’, p. 162.

⁵⁹ Skrimshire, ‘Eschatology’, p. 162.

has pointed out ‘the distinguishing mark of Christian faith is ... belief in Jesus Christ. The history of the Christian Church is built on the recognition of Christ’s significance for human life’.⁶⁰

Once again this task is far from straightforward. There is a bundle of considerations to take into account. How is the creaturely existence of Jesus (in addition to his humanity) to be expressed? In what ways might Jesus’ teaching of the kingdom of God and our capacity to discern “signs of the times” be interpreted? What is to be the relationship of a “groaning creation” in the Anthropocene to the core theological events of crucifixion, resurrection, and ascension? How is a cosmic Christology will be invoked in a “universe” which is expanding in space and deepening in time?

It is evident that much of the early discussion on Christology and climate change is happening through attention being given to the Incarnation and what is becoming known as a deep Christology. How that might take a different route from the classical and contextual forms of Christology is perhaps set out by Niels Henrik Gregersen.⁶¹ The way in which Gregersen addresses his topic is full of interest. He does not follow the usual route into the construction of a Christology. He does not begin with the conventional distinction between ‘who is Jesus?’ (Christology) and ‘how does he help us?’ (soteriology). Nor does he seek to address issues of how we draw upon the pluralist traditions to be found in the New Testament; nor does he begin an enquiry into the two natures of Christ (divine and human), nor theories of atonement (are you saved?).

Gregersen first considers who we are. What does it mean for us to be a human being in a time of climate change? Gregersen is not using the language of the Anthropocene, but he is on the way. Rather than immediately turn to biblical and theological ideas of our being made in the image of God and sin Gregersen draws upon an analogy of life. It is his intention to set us first inside the very processes of life and so, he notes: “we live more deeply than we are able to think and experience”.⁶² “We are metabolic organisms”; “we are also atmospheric beings”; and natural processes often operate “in such pre-reflexive silence”.

⁶⁰ Celia Deane-Drummond, ‘Who is Earth is Jesus Christ? Plumbing the Depths of Deep Incarnation’, *Christian Faith and the Earth*, (London and New York: T & T Clark, 2014), p. 31

⁶¹ Niels Henrik Gregersen, ‘Christology’, in Michael Northcott and Peter Scott, eds., *Systematic Theology and Climate Change*, (London & New York: Routledge, 2014), pp. 33-50

⁶² Gregersen, p. 33.

Gregersen observes that there is a kind of silence and ‘self-forgetfulness’ that we inhabit. There are two sorts of self-forgetfulness. There is the self-forgetfulness that belongs to the goodness of creaturely existence. .. “We could not thrive and survive if we constantly had to be aware of all our natural states and dependencies. We live by virtue of the silent biological processes at work beneath our awareness in order to focus on the foregrounds of our attention and act in a forwards-oriented manner”. There is another sort of silence: it is the one which “belongs to sin or self-centredness”. Gregersen notes that “We tend to forget that we are not only living by virtue of nature, but also at the expense of nature. We feed on the same resources as others do and by over-consumption, we destroy the conditions of future generations of human beings and other creatures”.

Gregersen’s reading of our soteriological necessity relies upon his analogy of life. ‘We tend to believe that our own centre of perception is the centre of the world itself, while practically ignoring our dependence on the atmosphere for our living and flourishing’.⁶³ He notes that ‘we seem neither able to interpret ‘the appearance of earth and sky’ nor ‘know how to interpret the present time’. The Christology which he develops is built upon this point of departure.⁶⁴ It is a trajectory which is determined by an implied sense of being in the

⁶³ Gregersen, p. 35.

⁶⁴ Gregersen duly notes that: it is anachronistic to ‘derive specific ethical directives or political solutions from the Jesus tradition’. Jesus was a teacher, healer and prophet – not a forecaster of far-future ecological disasters. (p. 36). For him the relevance of the synoptic Jesus tradition for ecological issues is ‘mediated by the theology of creation implied in Jesus teaching as well as his preaching of the kingdom of God to come.’

Of critical significance is also the means by which he draws upon the Johannine tradition. Jesus is the Word made ‘flesh’. Christology is not first and foremost, then, a backwards-oriented remembrance of the teachings of Jesus in his earthly life nearly 2000 years ago. Christology is carried by the conviction that ‘God’s eternal Word has revealed and re-identified itself - once and for all - as Jesus Christ within the matrix of materiality that we share with all the living beings’. This word made flesh, this Incarnation, is not about a bygone historical individual; this Christ who becomes flesh is ‘synchronous with each creature in time and co-inherent in all that exists in time and space’. God and nature existing alongside each other.

Here Gregersen is standing inside the tradition of those like Moltmann who believes that Christology must be viewed within a paradigm of nature as much as its of human history (which has been the dominant mode of exegetical criticism for a long time). It is at this point that Gregersen begins to draw upon an implicit understanding of the Trinity. Here he stands on very good ground with much recent theology which has ‘recovered’ this doctrine from collapsed understandings of God. The Trinity is necessary for the ecological well-being of the earth itself. And its necessity is driven by claims we make about Christ and the relationship of God to the creation.

The God of the Christian confession has chosen to create a world which is not divine itself. The moment the creation comes into being there is one complex relation. The Incarnation will bridge the ‘gap’ between creator and creature – there will be a cosmic Christ who is engaged within history but transcends that history. What also animates that relationship is the ‘life-giving Spirit’. Gregersen concludes: ‘Remove the life-giving Spirit and the cosmic Christ from the world of creation and there will be no creation. Take away God the Father as the source of all reality and there will be no creaturely events flowing out of divine love.’ (p. 37).

Competing contexts for our understanding of who Jesus is.

Here Gregersen is making a contrast with the attitude many western Christians have about living in the world (creation) with New Testament claims concerning the Incarnation seen in the light of the Trinity. There is an often unspoken creed western Christians hold: for Gregersen its distinguishing marks are (though we may describe it at certain points a little differently): i). God is elsewhere, in principle unknown to us; ii). We ourselves live in a godless world of impersonal forces, though we have the luck to shape some humanitarian islands in an otherwise ruthless nature; iii). Jesus is a historical figure of the past: speaking of Christ is a mythic ornamentation; iv). The Christian church is the fellowship among those who gather to remember Jesus as a remarkable person from a past civilisation whose example might still be inspirational to us; and, v). just as we are each going to die individually, the world of creation is going to dissolve away anyway. Whether human life will come to an end through creeping global climate change or through other humanly induced catastrophes (such as warfare) p that's the end which also be God's end.

Gregersen places over against this what he refers to as New Testaments and the 'later Christology (confessed by) the Church. i) rather than being unknown God is revealed and manifest in Christ who dwelt amongst us; ii). We live in a world created out of the love of God and so loved by God that he sent his only Son; iii). In Jesus the Father's eternal Logos took bodily form; iv). The church is more than a place for remembrance and cultivation of tradition. The church is the body of Christ; v). God has promised to hold fast to the creation so that the world will be re-created; the Christian faith looks forward to the 'world that is to come'.

In view of these claims Gregersen argues that Christology has unique resources and a mandate for speaking of a union of creator and creature. The doctrine of the Trinity expresses this encompassing reality. It is not an antique discussion bound by out of date Greek philosophical categories; the Trinity transcends its philosophical / linguistic origins; it seeks to express instead God's act of creation, incarnation, and reconciliation of the created order.

The two natures of Christ

Gregersen approaches the matter of the two natures of Christ - his humanity and divinity – in a way which is strikingly different. There is no desire to get bogged down in the minute detail of the Chalcedonian definition nor the various theories espoused in the early church as to how these two natures could be mixed or remain 'unconfused'. In terms of an initial rendering of the Incarnation Gregersen prefers to think of how Jesus participates in history through his 'body in an intergenerational context'.

His biological body possesses no independent existence in the gospels: he is not a detached deity. Rather, 'he moves geographically, as he wanders through landscapes: he stops, speaks, eats and drinks'. His biological body is also a social body insofar as he walks and talks with others. He acts with a personal agency but never in the sense of a modern autonomous individual: 'he is acting on behalf of others while representing God to people'. He is moved and led by the Spirit – 'the real protagonist of the story'. His personal agency is always related to God the Father and the Spirit.

His humanity is informed through 'an extended body' which is a term designed to observe how human consciousness and activity is always 'co-determined by natural environments and cultural artefacts'. The body and mind of Jesus appears to be 'agitated by the life contexts in which he finds himself'. Gregersen notes how those contexts are a combination of ecological spaces (deserts, lakes, rivers, hills) as well as social and cultural contexts. Jesus is embedded in nature (Echlin) in a way which binds history, culture, creatureliness and space

Some theologians like to think of Christology in terms of the prepositions we use: below, above, beneath, behind. In terms of his humanity Gregersen refers to the 'intergenerational nature' of Jesus which, in effect, incorporates the prepositional use of behind and before. The intergenerational nature of his being is represented by the way in which he is placed inside a biophysical heritage – (Colin Gunton speaks of the 'biophysical limits' of Jesus the creature). This heritage can be seen both in terms of his Jewish ancestry (via Matthew back to Abraham) and common humanity (via Luke back to Adam).

Gregersen notes that the gospel writers do not place Jesus inside what some historians now speak of human culture in terms of 'deep history'. The reference here is not simply to kinship relationships but also embraces how our personal histories embrace 'the co-evolutionary spirals in the community between humans, animals and plants, thus leading to gradual changes in ecological systems'. In the context of speaking about Christ in time of climate change Gregersen argues for Jesus being situated inside the whole unfolding history of creaturely existence – while looking forward to a kingdom of God directed to all future generations. Gregersen has us re-think the meaning of the close of Matthew's gospel Jesus where the risen Christ is with us to the close of the age. We might wonder if that age is the Anthropocene.

The horizontal and the vertical

Anthropocene. The response to Moltmann's question of where is Christ to be found after Chernobyl could never have foreseen this journey which has been opened up by Crutzen first coined the term.⁶⁵

Of critical importance for a Christology is how to balance the 'horizontal timeline' with the 'vertical dimensions of divine life'. If there is only a concern for history and humanity, then in this view 'Jesus .. will be depicted as an individual in a bygone past'. It will rule out the prospect of seeing what Gregersen refers to as the 'nexus between Jesus and the cosmos'. The practice of isolating a bit of his teaching here or there simply does not do enough. What historical scholarship must do is establish a 'critical minimum; that might go back to an historical person called Jesus of Nazareth and 'then, perhaps extract something of a more general interest from his teachings and doings'. Gregersen is not disinterested in the historical quests of Jesus for the sake of theology but is aware of their limits. This approach where a 'text' is isolated and 'applied' from the historical Jesus is 'rather narrow'. What is required is the setting of Jesus in 'constant exchange with his contemporaries while offering a view of God's presence in the world of creation, and a wisdom practice that makes the reign of God close to anyone affected by his message (now as well as then). Rather than get behind the text for a systematic theology is the need to get 'in front of' it.

Having established that point Gregersen considers the intersection of the vertical and horizontal in Jesus' doings and teachings. There is, he argues, a mingling of high and low in Jesus' talk of the kingdom. He can compare the coming of God's kingdom to a mustard seed: your will be done on earth as it is in heaven. The earth is a recurrent motif in his teaching. Often in the gospels Jesus is alone in 'apparent solitude in nature'. There is no hint anywhere of language to do with being in dominion over nature. Jesus refers to himself as the 'Son of Man' / the son of Adam / the son of the earthling. Jesus also draws upon the wisdom traditions of the Hebrew Scriptures for the purposes of finding 'the way'. The parables are like invitations to divine wisdom. What Gregersen argues is that, here, we have an 'earth-awareness' in the Jesus' tradition and it is made visible through this mingling of high and low.

Where then in the purpose of God in this reading of deep incarnation? Gregersen distances himself from the classical idea which goes back to Anselm – why did God become human? That idea is never found in the New Testament itself. Paul refers to Christ bearing 'human likeness'; the prologue in John's gospel refers to the Word becoming flesh; the councils of the early church declared that God's eternal son was incarnate and he 'was made man'. There is no reference to why did God become human.

Gregersen places emphasis on the idea of flesh, all flesh and how that represents the material world. The gospel of John points to 'the living and spirited embodiment' which is contrasted with the world of 'sin and decay'. The comparison is not between humanity and the rest of creation. Gregersen concludes: 'In Jesus Christ, the divine Logos assumed the entire realm of humanity, biological existence, earth and soil'. God's Logos, Word, Wisdom shares the condition of material existence with all the flesh that comes into being in order later to disintegrate.

For the sake of his soteriology Gregersen draws upon the classical idea espoused by Gregory of Nazianzus: "what Christ has not assumed he has not healed, but that which is united to his Godhead is saved". Gregersen argues that the body of Jesus here cannot simply refer to his physiological entity; our understanding of our interdependence with the rest of creation and its creatures must include the 'extended body of Jesus' – and thus all flesh. If this is so, then, must not there not also be a healing of non-human existence? Can human salvation be interpreted apart from the rest of creation which forms us and on which we depend and to which we will contribute?

The inevitable consequence for Gregersen is a reconsideration of who is our neighbour. What does that now mean in a world of global inter-dependence? 'In a sense, non-human creatures have also become our neighbours since we are breathing the same air and using the same resources as they do'. We cannot do otherwise as metabolic and atmospheric beings. It is against this kind of future (in front of the text) that Gregersen invites us to consider who is our neighbour on planet earth? Does it include our fellow creatures and future generations?

⁶⁵ For responses to the issues raised by Gregersen, see Celia Deane Drummond "Where on Earth is Jesus Christ? Plumbing the Depths of Deep Incarnation", in Ernst Conradie, Sigurd Bergmann, Celia Deane-Drummond, and Denis Edwards (eds.), *Christian Faith and the Earth: Current Paths and Emerging Horizons in Ecotheology*, (London and New York: T.&T. Clark and Bloomsbury, 2014); pp. 31-50. ; Elizabeth Johnson, *Ask the Beasts: Darwin and the God of Love*, (London: Bloomsbury, 2014); Niels Henrik Gregersen (ed.), *Incarnation: On the Scope and Depth of Christology*, (Minneapolis: Fortress Press, 2015).

