



Can we locate our origin in the future? Archonic versus epigenetic creation accounts

**Author:**Ted Peters^{1,2} **Affiliations:**

¹Faculty of Theology, Graduate Theological Union, Center for Theology and the Natural Sciences, Berkeley, United States of America

²Department of Systematic and Historical Theology, Faculty of Theology and Religion, University of Pretoria, Pretoria, South Africa

Research Project Registration:**Project Leader:** J. Buitendag **Project Number:** 2402343

Description: This research is part of the research project, 'Understanding Reality (Theology and Nature)', directed by Prof. Dr Johan Buitendag, Department of Systematic and Historical Theology, Faculty of Theology and Religion, University of Pretoria.

Corresponding author:

Ted Peters, tedfpeters@gmail.com

Dates:

Received: 19 Apr. 2022

Accepted: 14 June 2022

Published: 28 July 2022

How to cite this article

Peters, T., 2022, 'Can we locate our origin in the future? Archonic versus epigenetic creation accounts', *HTS Theologiese Studies/Theological Studies* 78(2), a7656. <https://doi.org/10.4102/hts.v78i2.7656>

Copyright:

© 2022. The Author. Licensee: AOSIS. This work is licensed under the Creative Commons Attribution License.

Read online:

Scan this QR code with your smart phone or mobile device to read online.

Myths of origin in archaic culture – including the Hebrew Scriptures – locate reality at the point of origin. The Greek term, *αρχη*, means both origin and governance. How something originates governs its definition; it was assumed by our ancestors. Hence the term archonic. Until we get to Christian eschatology and the promise of the new creation. In the New Testament, we find that God's eschatological consummation will retroactively define what has always been. God's redemption will epigenetically redefine what occurred at our genesis. Who you and I really are as creatures will be determined by our completion in the Kingdom of God. The new creation, Omega, determines what was true at the point of origin, that is, at Alpha.

Contribution: This article develops a theology of nature that incorporates natural science and augments the journal series in this subject area. Furthermore, this article develops a retroactive ontology based on the New Testament promise of an eschatological new creation.

Keywords: origin; future; myth; archonic; epigenetic; retroactive ontology; prolepsis; laws of nature; Jan C. Smuts.

To be is to have a future; if someone takes away your future, you are dead¹

Let me restate this: *to be is to have a future*. Here is the implication for the Christian doctrine of creation: the way God gives being to creatures is to give them a future. Each moment, God gives the cosmos the next moment. God is moment by moment giving to all of reality its future. Without this future-giving on the part of God, all of reality would freeze up and cease. God 'gives life to the dead and calls into existence the things that do not exist' (Rm 4; 17b).²

More. God has promised to give the history of creation an eschatological redemption. A healing. This transformation of all creation's fragmented parts into a single whole is symbolised by 'the kingdom of God' or the 'new creation'.

Still more. God's promised transformation is the ground of being for all that is present and past. All that is or ever has been gains its full quiddity from what will be.

In what follows, I will guide us up two roads towards the apprehension of reality. One road is the archonic path that relies on finding essence in the origin augmented by an unfolding or *futurum* view of the future. The other road is the epigenetic path that relies on novelty, emergent holism and an *adventus* view of a divinely graced future. Both roads pass by a scientific shopping mall where Big Bang cosmology and genetic determinism are on sale. Might either of these scientific items need alterations at the point of sale?

My task in this contribution is to construct a theology of nature and history based on a retroactive ontology. The pivot will be God's eschatological redemption of creation as pre-actualised in the historical Christ event. According to Karl Rahner, what is pre-actualised is God's absolute future. 'The incarnation and resurrection of Jesus Christ [is] the irreversible beginning of the coming of God as the absolute future of the world and of history' (Rahner 1978:297–298).

1. Earlier developments of this retroactive ontology appear in Peters (1995, 2003, 2006a, 2006b, 2015).

2. It may appear that I embrace the type of occasionalism formulated by al-Ghazali, who denied efficient causation and affirmed that God recreates the cosmos anew each moment. Creatures are merely the 'occasion' for divine action (New-Advent 2022). The retroactive ontology I proffer here differs. Your and my freely chosen actions function as efficient causes in the course of the world's events. God's release of the free subject from the constraints of the past enables efficient causation by creatures in general and human action in particular.

Note: Special Collection: Theology and Nature, sub-edited by Johan Buitendag (University of Pretoria).

Christ's death and resurrection insert into history a proleptic anticipation of the new creation yet to come into history. In short, I would like to construct a Christocentric holism. Largen (2021), the former editor of *Dialog, A Journal of Theology*, gets at this when drawing out the implications of the deep incarnation:

This concept of deep incarnation reminds us that, in Christ, God entered into the whole of creation and united all beings with God, redeeming the entire material universe in the process. (p. 282)

One future for the whole of creation.

The fork in the road: Archonic versus epigenetic

'Two roads diverged in a yellow wood', wrote poet Robert Frost (1916). These two roads have street signs. One reads: *archonic*. The other reads: *epigenetic*. Which one will take our mental vehicles towards a life vivified by reality?

The archonic view is the unfolding view. According to this first view, everything is given at the beginning. What happens over time consists of an unfolding or realisation of potentialities already present at the starting point. For the universe – the macrocosm – the starting point is the Big Bang. For your or my identity – the microcosm – the starting point is the genome we inherit.

The Greek root, ἀρχή, means both 'beginning' and 'rule'. This archonic or unfolding view assumes the created order was in principle complete and final at the point of origination. This implies that all subsequent events and changes consist only in rearrangements and reshufflings of the original material and forms. The present and future have been predetermined. Or at least the range of potentials is delimited by the past. All radical initiatives, novelties or creativeness are effectively banned from entering the universe.

The other option, the epigenetic road, takes us towards a future that includes novelty, wholeness and advancement. After we have travelled the epigenetic road some distance, suddenly and without warning, we will get hit from the traffic coming in the other direction. The ultimate future will come towards us. That future is God's *adventus* (Moltmann 1979:29–30). That divine future will bring a creativity that will be transformative, healing and renewing. Like sending a Christmas wish list to Santa, epigenesis opens us to receive *adventus* with joy (Peters 2015:Chap. 1).

To reiterate, the archonic option at the fork in the road leads towards a future understood as *futurum*. Because essence has been decided at origin, its *futurum* will consist of an unfolding. An oak tree is the *futurum* of an acorn. The future is already fully present at the beginning in seed form.

With the term *adventus*, in contrast, we anticipate the appearance of something qualitatively new. The future is not merely the effect of past causes or the actualisation of existing

potential. The kingdom of God that cleanses our world of its original sin, for example, cannot be simply the product of present causes, because all such present causes are corrupted and unable to shed their corruption. The kingdom of God must then come as an advent, as an act of divine grace whereby the creation undergoes genuine renewal.

Following the epigenetic path recognises that nature is historical. And historicised nature is open to novelty. Included in novelty is God's new creation. The historical Jesus is one historical event among others that points us beyond everything we currently know to a new reality being made ready for us by God. The future renewal of all things that the advent of the divine kingdom will bring has already appeared ahead of time in the person of Jesus from Nazareth, the proleptic advent of the ultimate renewal and rule of God.

If we want guidance to the eschatological new creation, our GPS tells us to follow the epigenetic road through the yellow wood.

Archonic myths and constitutions

If you were to wake up in life and find yourself an Egyptian four millennia ago, you might ask existential questions such as, 'Why does the pharaoh sit on the throne as king? Why does the Nile River flood every spring and, after receding, leave rich soil for the farmers?'

Your answer would come in the form of a myth of origin. In brief, here is how it goes. Osiris had been the rightful king of Egypt, responsible for political harmony and also nature's harmony in the form of cosmic order, *maat*. Osiris' brother, Set, slays Osiris and illegitimately assumes the throne. Order or *maat* gives way to disorder, both in nature and society. The dialectic of the Nile's flooding and receding is the dialectic of disorder and order. Isis, Osiris' faithful wife who is pregnant with a son, Horus, raises the dead Osiris. Horus is placed upon the throne as pharaoh and *maat* is restored. But disorder returns with every spring flood, and order must be gained once again in this annual cyclical struggle.

That rich soil left behind when the Nile recedes? That is the body of the slain Osiris. Osiris' body is fertile, life-giving. Even in death, the god Osiris graces the people of Egypt.

The story of Osiris is a myth of origin. Here is my definition of *myth*: a myth is a story of how the gods created the world, or a part of it, in the beginning, *in illo tempore* (the time before there was any time), that explains why things are the way they are today. This definition summarises the extensive research on myths in archaic cultures pursued by Mircea Eliade (Eliade 1957). Such a myth is clearly archonic. Today's reality is determined by its origin.

Might we find mythical thinking in the Bible? Yes. Genesis 1:1–2:4a by the Priestly writer tells how the world was created by God in seven days. This fixes the paradigm.

The week will be seven days. The Sabbath will be the Hebrew's day of rest. Why? Because God rested on that first Sabbath day. Even the term, *genesis*, implies an archonic understanding of reality.

In our modern post-Enlightenment political thinking, myths have been replaced by constitutions. A new nation is defined by its constitution. Whatever happens in history following the constitution is interpreted in light of the constitution.

The United States of America has its origin with the coming into force of the U.S. Constitution in 1789. Since then, the Supreme Court and routine political rhetoric interprets the Constitution. The Constitution is presumed to be essential, definitive, sacred.

Creation myths and constitutions provide examples of archonic thinking. Origin and essence belong together in a single package. So says common sense.

Big Bang, evolution and history

Today's natural scientists think they have replaced archaic myths with rational accounts of nature's workings. But has archonic thinking been dismissed too? Is archonic thinking just lurking on the edges of our scientific theorising? Has it simply gone underground?

The initial conditions at the Big Bang are alleged to be determining the course of nature today and tomorrow. Oh, yes, scientists debate whether those initial conditions were biophilic or not. Did the Big Bang plant the acorn of what would become the tree of life on planet Earth? If the anthropic principle (Carter 1974) holds, then the universe already knew 13.82 billion years ago that we were coming.

According to physicists John Barrow and Frank Tipler, here's how the concept of the anthropic principle works. 'The observed values of all physical and cosmological quantities ... [made possible if not inevitable] sites where carbon-based life can evolve' (Barrow & Frank 1986:16). In short, the conditions at the beginning of the Big Bang determined in advance that evolution would lead to *Homo sapiens*, right along with fast food and rock music:

'As we look into the universe and identify the many accidents of physics and astronomy that have worked to our benefit,' 'it almost seems as if the universe must in some sense have known we were coming'. (Dyson 1979:250)

The validity of the anthropic principle in its strong and weak forms is a matter of debate. What is important for our discussion here is the fact that today's scientific theories, just like the creation myths of our archaic ancestors, search archonically for our essence in our origin.

Proponents of the new field of Big History are willing to turn Big Bang science into a modern creation myth that explains everything of meaning to the human race. The truth of the myth is found in its belief, not in its empirical evidence. At least, according to Big Historian Christian (2004):

So, the strongest claim we can make about the truth of a modern creation myth is that it offers a unified account of origins *from the perspective of the early twenty-first century*. (p. 6)

Science may replace myth, but the archonic framework remains the constant.

The archonic fallacy

When we construct a theology of nature that respectfully incorporates scientific findings, we need to be wary of archonic Trojan horses entering the theological citadel. The critical nose of the theologian should sniff out fallacious reasoning, even when it appears within solid science. After all, according to Oxford's Celia Deane-Drummond, 'A theology of nature is appropriate as long as it is suitably qualified by proper attention to revealed theology' (Deane-Drummond 2009:xvi).

Here is the appropriate warning. Archonic thinking can proffer fallacious reasoning. This is the case especially when evidence suggests that novelty is occurring. The archonic fallacy is committed when the current state of affairs is assumed to be exhaustively explained by appeal to essential factors present at the beginning, at the *arché*. This is fallacious because it precludes, at the level of assumption, that new things can occur or emerge.

Yet, empirically, new things do emerge, and they are observable, hence the fallacy of archonic reductionism. What is important for the theologian is that already built into history and nature is an openness for *adventus*. The creation is ready for transformation for redemption.

Awareness of the archonic fallacy and nature's openness to *adventus* helps us describe the state of human genomics three decades ago. Let us turn from the Big Bang macrocosm to the microcosm – to your and my genetic inheritance.

Genetics and epigenetics

Note the kinship between our words, *gene* and *genesis*. Do our genes determine our essence?

During the period of the Human Genome Project in the 1990s, genetic determinism reigned over science like the pharaoh reigned over Egypt. Nobel Prize-winning geneticist James Watson described the human genome as the blueprint of humanity. Genes are 'what makes us us' (Watson 2003). Similarly, Gilbert (1992) touted that the genome is:

The grail of human genetics ... the key to what makes us human, what defines our possibilities and limits as members of the species *Homo sapiens*. Our genome, Gilbert proclaimed, answers the question: 'What makes us human?' (p. 84)

From origin to essence. That was the widespread assumption of our Human Genome Project researchers three decades ago.

In the decades since, laboratory research has gradually undercut the archonic assumptions at work in the molecular

biology of the 1990s. The omnipotent reign of genetics has been weakened by epigenetics. Ongoing research shows how environmental and systemic factors play a much larger role in our phenotype than previously thought.

In a 2008 article in *Nature*, we find: 'It has become apparent that the gene-function relationship is not so clear cut' (Chouard 2008). As the term *epigenesis* suggests, the gene is not solely in charge of its own expression or function.

Epigenetic factors – factors beyond the gene within the cell or coming from the environment – come into play. Hence, we find the editors of *Nature* appealing to epigenetics in 2015:

Upon the genome, on the genome, over the genome – take your pick – epigenetics collectively describes changes in the regulation of gene expression that can be passed on to a cell's progeny but are not due to changes to the nucleotide sequence of the gene ... the epigenome changes with cell and tissue type. (p. 273)

If we have assumed that the gene constitutes both origin and essence – a blueprint – then discoveries of epigenetic processes might require a change in our assumption. Epigenetics suggest that who we are is more than what our genomes determined. Origin is not the essence.

Human genomics today seems to have liberated itself from the archonic fallacy of genetic determinism. But science may not have liberated itself completely from determinism. After all, a determined determinist could post a two-factor determinism: genes plus environment. Or nature plus nurture, in determinism's more classic rendering. The archonic fallacy is as stubborn as hardened bubble gum on our shoe sole.

So I wonder if the epigenetic path might lead us away from this fallacy. I wonder if we could mine this protean term, *epigenetic*, for still more rich ore?

Emergent epigenetics

As a theologian, I find this term, *epigenetics*, handy. It becomes most illuminative if we abstract it from molecular biology and expand it into an ontological term. To switch on this illuminative light, let us go back a century to the pioneering work of South African statesman and biologist Jan C. Smuts. Smuts observed emergent holism within evolutionary processes. That is, he observed epigenetic holism in nature.

Smuts observed that nature is temporal and historical, even creative. Things move through time. They change and develop. What makes temporal movement significant, according to Smuts, is that it is accompanied by genuine creativity, by emergence, by epigenesis.

Evolutionary theory inspired Smuts to reject the notion of a completed beginning in the past. Instead, we have 'a real progressive creation still going forward in the universe' so that 'the sum of reality' is not constant but is:

Progressively increasing in the course of evolution ... Evolution is not merely a process of change, of regrouping of the old into new forms; it is creative; its new forms are not merely fashioned out of the old materials; it creates both new materials and new forms from the synthesis of the new with the old materials. (Smuts 1926:89)

From these observations and speculations arises the concept of evolutionary development as an epigenesis rather than an unfolding of a previously fixed genetic origin. Epigenetic movement is understood as creative of the new, as self-organising, opening up new paths and rendering possible new choices. Epigenesis creates freedom for the future. And in a very real sense, thought Smuts, epigenesis breaks our bondage to the past and its fixed predeterminations.

Smuts proffered a concept of emergent holism, wherein composite actualities produce new wholes that are not simple. Rather, the new wholes represent higher levels of complex and integrated being. The resulting epigenetic ontology incorporates temporal movement and foresees new and more inclusive realities appearing in the future. 'The pull of the future' is as essential to the life of an organism as 'the push of the past', and the new wholes that arise are the centre and creative source of reality (Smuts 1926:115–116). The natural world undergoes the pull of the future, this biologist contended. Could this scientific insight be of value to a theology of nature? (Gregersen 1994).

Nature as history

Smuts' observation might lead the theologian to the following construction: nature is embedded in history. Oh, yes, liberal and neo-orthodox theologians in the 19th and 20th centuries thought of nature and history as two separate categories. But epigenesis suggests that nature itself has a history that began with the Big Bang and continues through our present moment towards an as-yet-unknown future. Perhaps history should become the comprehensive category, with nature subsumed within it.

Might such a historicisation of nature be recognised by our scientists? This is not unthinkable. Famed physicist Carl Friedrich von Weizsäcker, invoking the second law of thermodynamics that makes clear that time in our universe goes only one direction – from the past to the future – concluded that nature is fundamentally and irrevocably historical (Weizsäcker 1940:8). And, adds Harvard astronomer Abraham 'Avi' Loeb, 'The cosmos changes all the time' (Loeb 2022:42). Nature has events, just as we do. Nature has an as yet undetermined future, just as we do.

Today's theologian need not accept without critical question the archonic mindset that all too easily shrink-wraps Big Bang theory and, on occasion, genomics too. Rather, for the theologian, nature can be folded into history while recognising both its regularities and its novelties. Wolfhart Pannenberg rightly claims that 'History is the most comprehensive horizon of Christian theology' (Pannenberg 1970–1971:vol. 2, 1:15).

Today's theologian, then, can affirm that the laws and regularities of nature express the faithfulness of God within the ongoing history of creation (Pannenberg 1970–1971:vol. 2:76n). This calls to mind Saint Symeon (949–1022), who was called a 'New Theologian' a thousand years ago. Symeon puts it this way: 'The words and decrees of God become the law of nature' (Symeon 1979:82).

What would history do to the laws of nature?

Now that we have subsumed nature's regularities and novelties under the category of history, what happens to the laws of nature? Are the laws of nature established and fixed at the point of origin? Are they eternal? Are they unchangeable?

Would the epigenetic road look different? Yes. The regularities in nature, subject to divine faithfulness, would be open to change over time. When travelling the archonic road, in contrast, nature's unchangeable laws would stretch a berm that hems the way forward.

What are the theological implications? Should God wish to change a law of nature, then God is free to do so. And this is exactly what God did on the first Easter Sunday.

The first instantiation of a new law of nature

Might the epigenetic road, with its historicisation of nature and readiness for an *adventus* future, open nature for God's promised eschatological transformation? If so, will explaining this require a new ontology?

Yes, answers the late Arthur Peacocke, a biologist and theologian at Oxford's Ian Ramsey Centre. Peacocke (2007) asks for a new ontology to account for both Jesus' Easter resurrection and God's promise of a new creation:

In Jesus the Christ a new reality has emerged and a new *ontology* is inaugurated ... This incarnation uniquely exemplifies that emergence-from-continuity that characterizes the entire process whereby God is informing the world and continuously creating through discontinuity. (p. 37)

Discontinuity amidst continuity makes novelty possible. To have either Easter or a new creation requires an ontology that includes novelty. It requires following the epigenetic path.

Robert John Russell refines this ontology. Russell is the founder and director of the Center for Theology and the Natural Sciences in Berkeley, California. Russell dares to describe Jesus' Easter resurrection as the First Instantiation of a New Law of Nature (FINLON). This new law of nature anticipates God's promised eschatological transformation and redemption.

The eschatological new creation will include some new laws, such as the law that dead people rise. Easter's cosmic

meaning is that one of those future new laws has been obtained here and now, within the old creation:

By analogy with the resurrection, the new creation will be a transformation of the world as a whole and all that is in it. Thus, the new creation will be both continuous and discontinuous with the present world. (Russell 2002:9)

In sum, Jesus' Easter resurrection proleptically incarnates the advent of the new creation ahead of time.

God creates from the future, not the past

Here is our argument so far. We came to a fork in the road, and we elected to follow the epigenetic rather than the archonic path. Once on the epigenetic path, we could perceive the difference between an unfolding future, *futurum*, and a future that would come at us bearing something radically new, *adventus*. This led to a critical analysis of unnecessary archonic assumptions that frame scientific theorising about the macrocosm, the Big Bang and the human genome's microcosm. By embedding scientific knowledge about nature within the category of history, we could now account for epigenetic novelty and even, in some instances, holistic healing. It would not be unthinkable to speculate that God's redemption could consist of an eschatological healing of all things through an emergent leap to a higher whole that integrates all past parts.

This leads to my principal thesis: *God creates from the future, not the past*. Pannenberg points up the epigenetic road towards a retroactive ontology, almost but not quite reversing the direction of cause-and-effect. 'We see the present as an effect of the future in contrast to the conventional assumption that the past and present are the cause of the future' (Pannenberg 1969:54). That is to say, it is Omega that creates Alpha. 'Omega is more than alpha', interjects Jürgen Moltmann (Moltmann 1969:36).

Let us return to the moment of Alpha, to the cosmic Big Bang or to our inherited genome. Perhaps we could say this: *the first thing God did for the cosmos was to give it a future*. By calling us from nothing into something, God bestowed a future that set reality on the course of historical becoming. By the term *creation*, we designate God's gracious gift of futurity. And moment by moment with unceasing faithfulness, God continues to bestow a future. Right now, God is bestowing on you and me our future.

How might we think of the present moment epigenetically, historically and eschatologically? The present moment is characterised by openness, openness to what is new. This means that God's future-giving is both positive and negative. It is positive in that God is the ground of being, the one who protects what exists now from ceasing to be. God's work is negative, as well, in that by giving a new future, God releases the present from the grip of the past. Contrary to common sense, neither our origin nor other past efficient causes hold the present moment in the grip of inviolable determinism.

The present moment is open to change, open to what is new. This is because God liberates the present from the oppression of the past. New things can happen because God prevents the past from overpowering the present.

Back at Alpha, back in the beginning, the first thing God did was provide nascent reality with an open future. Since then, God has continued this double relationship to the created order, negatively releasing the grip of the past while positively offering being and openness to a future of new possibilities. Yes, past causes may set the berms of the road that the present moment is travelling. Yet the road is wide between the berms, and God opens up an array of potentials that await actualisation. The way the creatures within the world take free actions determines which potentials become actualised. Taking free actions forms us creatures into persons, while it contributes to the content of history.

Divine adventus and creaturely epigenesis

To say we as persons enjoy free will, I mean that we deliberate over an array of alternative potentials, decide which to actualise and then take the action that influences the course of future events (Peters 2020). God, the liberator, contributes to our momentary freedom by releasing us from the archonic grip of our origin and opening the gate to epigenesis.

This observation leads former *Zygon* editor Philip Hefner (1993) to describe the human being as a created co-creator:

The human being is created by God to be a co-creator in the creation that God has brought into being and for which God has purposes. We state this briefly in the term created co-creator. (p. 35)

Hefner's theological anthropology is fitting because it acknowledges how freedom of choice becomes future freedom.

Future freedom refers to the everyday fact that you and I make decisions and take actions that influence the course of future events in the world's history (Peters 2002:17–20). Only an epigenetic and historical account of the natural world will lead to an adequate explanation for the contribution of free creatures to efficient causation within the actual course of history.³

We will not be created until we have been redeemed

'To be human means to be in the world, to have a history, and to share the physical life of the cosmos', contends Kristin Johnston Largen (Largen 2021:191). There is a problem, however. The problem with this sharing the history of the

³Piotr Roszak (2022:1–6, at 5) invokes Thomas Aquinas to account for self-organisation and even creaturely freedom in nature. God's action consists in giving created beings the power to act – hence the popular Thomistic metaphor of God as the sun, which makes vision possible but which is not looked at directly. Nature itself gives the power to enact what it is'.

cosmos is the problem of sin, evil and suffering. This is the problem of the free human self. The problem of selfishness. The problem of emphasising the fragmented part at the cost of harmony to the whole.

With sin and its accompanying estrangement in mind, we can view the epigenetic understanding of God's creative process as one of complementarity, synthesis and renewal. As Augustine makes clear, our deepest personal aim is to centre our lives on God and, in turn, centre ourselves in the whole. Such is the fulfilment of human destiny. To assert oneself in resistance against this destiny constitutes sin and produces evil. 'Evil arises', writes Reinhold Niebuhr, 'when the fragment seeks by its own wisdom to comprehend the whole or attempts by its own power to realise it' (Niebuhr 1941:vol. 1:168). Will evil last forever?

The creation as we know it today groans in travail, awaiting the birth of a healed cosmos and a healed soul. 'The end is eternal life. For the wages of sin is death, but the free gift of God is eternal life in Christ Jesus our Lord' (Rm 6:22–23). The end is both *finis* as conclusion and *telos* as a goal to be fulfilled:

This double connotation of end as both *finis* and *telos* expresses, in a sense, the whole character of human history and reveals the fundamental problem of human existence. All things in history move towards both fulfillment and dissolution, towards the fuller embodiment of their essential character and towards death. The problem is that the end as *finis* is a threat to the end as *telos* ... The Christian faith understands this aspect of the human situation ... it is not within man's power to solve this vexing problem. (Niebuhr 1941:vol. 2:287)

God alone saves. God saves by absorbing the estranged parts into a healing whole, a whole that is greater than the sum of its parts.

South African systematic theologian Nürnberger (2016) illuminates eschatological redemption by shining the light of emergent holism:

The scientific theory of emergence has taught us that ... any *whole* is something more than, and something different from, the sum total of its *components*. The reason is that the whole is constituted by *relationships* between components, rather than the characteristics of the individual components. (vol. 1, p. 19)

God's promised eschatological redemption is best understood as overcoming sin through holistic healing. 'Christian eschatology is a *protest* of what *ought* to become against what *has* become and seemingly *will* become--and that in the name of a powerful and loving God' (Nürnberger 2016:vol. 2:501).

Only when the whole of reality has harmoniously integrated all the self-oriented parts will we be able to say that God has finally created the world. Only when each of us individually has been freely integrated into the kingdom of God, can

God look at the creation and declare, 'Behold! It is very good' (Gn 1:1–2:4a).

Conclusion

Because nature is epigenetic and historical, the present moment is ontologically open to the future. Nature and history are together open even to the future of God. This is the point of Rahner's *Eine Futurologische Kurzformel* (1978) or brief future-oriented creed:

Christianity is the religion which keeps open the question about the absolute future which wills to give itself in its own reality by self-communication, and which has established this will as eschatologically irreversible in Jesus Christ, and this future is called God. (p. 457)

I would like to say more. I would like our systematic theologians to construct a retroactive ontology with greater explanatory power than competing archonic ontologies. The initial axiom for retroactive ontology is this: to be is to have a future. It is God who calls us into being by graciously offering us and our cosmos a future.

God's future-giving comes in two forms. Negatively, God is releasing creatures such as you and me from the chains of our origin and from recent efficient causes each moment. Each moment, God lays before us a finite set of potentials, possibilities that prompt us to deliberate, decide and take action. By taking action, we liberated free creatures play a creative role.⁴ We become one efficient cause among many in the history of creation.

Positively, God makes promises. By raising Jesus from the dead on the first Easter, God promises to raise you and me as well into the new creation. Actually, more can be said here. By raising Jesus from the dead on the first Easter, God has actually begun his eschatological work of redemption. The final advent of the kingdom of God in which all estranged parts will be taken up into a transfiguring whole defines the very quiddity of what happened at Easter. Our past Easter takes its essence from its future in God's kingdom. The Big Bang genesis of creation gains its essence from the new creation proleptically anticipated in Jesus' Easter.

Omega retroactively defines Alpha. Omega invites each of us into the everlasting future of God's new creation.

Acknowledgements

The author would like to acknowledge Prof. Buitendag for the invitation to engage in the project 'Theology and Religion' of *HTS Theological Studies*.

4. It may appear to the reader that retroactive ontology borrows elements from Alfred North Whitehead's process metaphysics. This is the case on two counts. Firstly, my reliance on explanatory adequacy is inspired by Whitehead's four criteria for speculative philosophy. 'The rational side is expressed by the terms "coherent" and "logical". The empirical side is expressed by the terms "applicable" and "adequate" (Whitehead 1929, 1978:3). Secondly, Whitehead's description of the actual occasion contributes to my understanding of human freedom. God places before our subjectivity an array of potentials or possibilities the elicits from us deliberation, decision and action. With the exception of Marjorie Hewett Suchocki, most process theologians are reluctant to affirm an eschatological consummation or *finis* to God's creative work in nature and history. At this point, I part from my process colleagues.

Competing interests

The author declares that he has no financial or personal relationships that may have inappropriately influenced him in writing this article.

Author's contributions

T.P. is the sole author of this article.

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

Funding information

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

Data availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Disclaimer

The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of any affiliated agency of the author.

References

- Barrow, J. & Frank, T., 1986, *The anthropic cosmological principle*, Oxford University Press, Oxford.
- Carter, B., 1974, 'Large number coincidences and the anthropic principle in cosmology', in M.S. Longair (ed.), *Confrontation of cosmological theories with observational data, IAU symposium*, vol. 63, pp. 291–298, Riedel, Dordrecht.
- Chouard, T., 2008, 'Beneath the surface', *Nature* 456, 301–303. <https://doi.org/10.1038/456300a>
- Christian, D., 2004, *Maps of time: An introduction to big history*, University of California Press, Berkeley, CA.
- Deane-Drummond, C., 2009, *Christ and evolution: Wonder and wisdom*, Fortress Press, Minneapolis, MN.
- Dyson, F., 1979, *Disturbing the universe*, Harper, New York, NY.
- Editors, 2015, 'Beyond the genome', *Nature* 518(7539), 273. <https://doi.org/10.1038/518273a>
- Eliade, M., 1957, *The sacred and the profane*, Harcourt Brace and World, New York, NY.
- Frost, R., 1916, 'The road not taken', *Poem*, viewed 07 January 2022, from <https://www.poetryfoundation.org/poems/44272/the-road-not-taken>.
- Gilbert, W., 1992, 'A vision of the grail', in D.J. Kevles & L. Hood (eds.), *The code of codes: Scientific and social issues in the human genome*, p. 84, Harvard University Press, Cambridge, MA.
- Gregersen, N.H., 1994, 'Theology in a neo-darwinian world', *Studia Theologica* 48(2), 125–149. <https://doi.org/10.1080/00393389408600154>
- Hefner, P., 1993, *The human factor*, Fortress Press, Minneapolis, MN.
- Largen, K., 2021, 'Plurality and salvation: Possibilities in pannenbergs soteriology for comparative theology', in A. Hollingsworth (ed.), *The enduring promise of Wolfhart Pannenberg*, pp. 183–200, Lexington, Lanham, MA.
- Loeb, A., 2022, 'A fresh approach to the search for extraterrestrial intelligence (SETI)', in J. Andresen & O. Chon-Torres (eds.), *Extraterrestrial intelligence: Academic and societal implications*, pp. 41–86, Cambridge Scholars Press, Cambridge.
- Moltmann, J., 1969, *Religion, revolution, and the future*, Scribners, New York, NY.
- Moltmann, J., 1979, *The future of creation*, Fortress, Minneapolis, MN.
- New-Advent, 2022, *Occasionalism*, Entry, viewed 07 January 2022, from <https://www.newadvent.org/>.
- Niebuhr, R., 1941, *The nature and destiny of man*, vol. 2, Scribners, New York, NY.

- Nürnberg, K., 2016, *Faith in Christ today: Invitation to systematic theology*, vol. 2, Fortress, Minneapolis, MN.
- Pannenberg, W., 1969, *Theology and the kingdom of God*, Westminster John Knox, Louisville, KY.
- Pannenberg, W., 1970–1971, *Basic questions in theology*, vol. 2, Fortress, Minneapolis, MN.
- Peacocke, A., 2007, *All that is: A naturalistic faith for the twenty-first century*, Fortress, Minneapolis, MN.
- Peters, T., 1995, 'Playing god and germline intervention', *Journal of Medicine and Philosophy* 20(4), 365–386.
- Peters, T., 2002, *Playing god? Genetic determinism and human freedom*, 2nd edn., Routledge, London.
- Peters, T., 2003, 'The terror of time', in T. Peters (ed.), *Science, theology, and ethics*, pp. 63–78, Ashgate, Aldershot.
- Peters, T., 2006a, 'Omega and divine retroactivity', in T. Peters (ed.), *Anticipating omega*, pp. 11–27, Vandenhoeck and Ruprecht, Göttingen.
- Peters, T., 2006b, 'The future of resurrection', in R. Steward (ed.), *The resurrection: John Dominic Crossan and N.T. Wright in dialogue*, pp. 149–170, Fortress, Minneapolis, MN.
- Peters, T., 2015, *God – The world's future: Systematic theology for a new era*, 3rd edn., Fortress Press, Minneapolis, MN.
- Peters, T., 2020, 'The struggle for cognitive liberty: Retrofitting the self in activist theology', *Theology and Science* 18(3), 1–28.
- Rahner, K., 1978, *Foundations of the Christian faith*, Seabury Crossroad, New York, NY.
- Roszak, P., 2022, 'Imperfectly perfect universe? Emerging natural order in Thomas Aquinas', *HTS Teologiese Studies/Theological Studies* 78(2), a7199. <https://doi.org/10.4102/hts.v78i2.7199>.
- Russell, R.J., 2002, 'Bodily resurrection, eschatology, and scientific cosmology', in T. Peters, R.J. Russell & M. Welker (eds.), *Resurrection: Theological and scientific assessments*, pp. 3–30, Wm. B. Eerdmans, Grand Rapids, MI.
- Smuts, J.C., 1926, *Holism and evolution*, N. and S. Press, Cape Town.
- Symeon, N.T., 1979, *The first created man*, St. Herman of Alaska Brotherhood, Platina, CA.
- Watson, J., 2003, 'Renovating the house of being: Genomes, souls, and selves', *Annals of the New York Academy of Sciences* 1001(1), 245–252.
- Weizsäcker, C.F.V., 1940, *The history of nature*, University of Chicago Press, Chicago, IL.
- Whitehead, A.N., [1929] 1978, *Process and reality*, corrected edn., Macmillan, New York, NY.